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ECONOMIC AND INDUSTRIAL AFFAIRS

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27 November 1984

EAST EUROPE REPORT

ECONOMIC AND INDUSTRIAL AFFAIRS

CONTENTS

INTERNATIONAL AFFAIRS

- Foreign Trade Development of CEMA Countries Analyzed
(Vasil Kalchev; IKONOMICHESKA MISUL, No 7, 1984) 1

BULGARIA

- Kozloduy Nuclear Power Station Announces Job Openings
(VECHERNI NOVINI, 14 Oct 84) 14

CZECHOSLOVAKIA

- Effectiveness of Credit Differentiation Evaluated
(Frantisek Krejca; FINANCE A UVER, No 7, 1984) 18

HUNGARY

- Minister Discusses Industrial Policy Problems
(Laszlo Kapolyi; PENZUGYI SZEMLE, No 8-9, Aug-Sep 84) 30

POLAND

- Economists Society Critiques 1985 Plan
(Marek Misiak; ZYCIE GOSPODARCZE, No 42, 14 Oct 84) 40
- Resources Conservation Report on Centralized Controls
(Tomasz Jezioranski; ZYCIE GOSPODARCZE, No 42, 14 Oct 84) 44
- Seeking Ways To Avoid All-Out Wage, Price Freeze
(Zbigniew R. Wierzbicki; ZYCIE GOSPODARCZE, No 39,
23 Sep 84) 54
- Housing Construction Stumbling Blocks Analyzed
(Piotr Dominiak; ZYCIE GOSPODARCZE, No 39, 23 Sep 84) 60
- Plan for 1985 Faulted on Living Standard Goals
(Lucyna Deniszczuk; ZYCIE GOSPODARCZE, No 39, 23 Sep 84) 66

| | |
|---|----|
| Prospects of Ferrous, Nonferrous Metals Sectors Viewed (Aleksander Szpilewicz; PRZEGLAD TECHNICZNY, No 38, 16 Sep 84) | 74 |
| Adherence to Proper Agricultural Schedule Emphasized (GROMADA-ROLNIK POLSKI, 2, 4 Sep 84) | 80 |
| Best Grain Schedules, by Krek Field Work, Animal Raising, by Antoni Swiderski, Ewa Obidzinska | |
| Aluminum Oxide Plant Project (RZECZPOSPOLITA, 5 Oct 84) | 85 |
| Predictions on Timing of End To Food Rationing (Grazyna Smulska; ZYCIE GOSPODARCZE, No 40, 30 Sep 84) ... | 86 |
| Briefs | |
| Planners Confer on Restructuring | 97 |
| Rail Electrification Progress | 97 |
| Coal Mining Reorganization | 97 |

YUGOSLAVIA

| | |
|--|----|
| Rate, Structure of Investments in Last 4 Years (Petrasin Petrasinovic; PRIVREDNI PREGLED, 12 Oct 84) | 98 |
|--|----|

FOREIGN TRADE DEVELOPMENT OF CEMA COUNTRIES ANALYZED

Sofia IKONOMICHESKA MISUL in Bulgarian No 7, 1984 pp 32-41

[Article by Vasil Kalchev: "Foreign Trade of CEMA-Member Countries--Dynamics, Structure, Prospects"; signed to press 29 March 1984]

[Text] Thirty-five years ago the first international organization in the world of a new socialist type was founded. Based on the principles of socialist internationalism, complete equality of rights, mutual assistance and advantage, the Council for Economic Mutual Assistance by its activity is making a significant contribution to the successful socioeconomic development of the countries of the socialist community. "Socialist economic integration," Comrade T. Zhivkov points out, "has entered upon a new stage. The almost-equalized production capabilities of the socialist countries and satisfaction of their paramount needs require, on the one hand, the production of only high-quality products and, on the other, the most efficient production from the viewpoint of the entire socialist community."¹

The CEMA-member countries are solving the fundamental problems in the building of socialism by mutual cooperation. It fosters the development of productive forces and the creation and strengthening of the material and technical base of socialism. The results achieved in the socioeconomic development of the countries in the socialist community significantly affect their foreign trade and the volume and structure thereof. The quantity and quality of a given country's export resources, as well as its import needs depend on the overall state of the economy.

During the years of CEMA's existence the economies of its members have been radically transformed. Their overall potential has grown many fold, thus expanding the sphere of socialist production relationships. A significantly higher rate of production growth than that of the capitalist countries has been achieved.

During the period from 1950 to 1982 the national income of CEMA-member countries grew 8.3-fold, i.e., the average annual rate of its growth was 6.8 percent.² In the developed capitalist states national income grew 3.3-fold during the same period, the average annual rate being 3.8 percent. The octupled economic potential of the countries of the socialist community and their almost twofold lead over the capitalist countries' rate of development are striking

characteristics of the advantages of the socialist system and of the progress made as a result of CEMA's activity.

The results in the basic sector of the economy--industry--are still more dynamic and illustrative. Most of the CEMA-founding countries were economically backward. This held true first and foremost in respect of industrial production, which accounted for a comparatively small share of the individual countries' national product. Thanks to socialist industrialization, in which Soviet technical and credit assistance was of inestimable importance,³ industry developed at an overtaking rate.

Industrial production in the CEMA-member countries grew 13-fold in 1950-1983 at an average annual rate of 8.4 percent. In the developed capitalist states the increase was 3.8-fold, and in the developing countries 7.1-fold. In the first year after the founding of CEMA (1950) its members produced about 20 percent of the total volume of world industrial output, and now over 35 percent.

Stable and dynamic economic development, as well as accelerated growth of industry, to a certain extent predetermines foreign-trade scale and structure. All CEMA-member countries are characterized by overtaking dynamics in the development of trade as compared with national income and industrial production (see Table 1).

Table 1
GROWTH OF FOREIGN TRADE OF CEMA-MEMBER COUNTRIES*
(1960=100), in %

| 1 Страна | 1970 | 1980 | 1982 |
|-------------------|-------|-------------------------|-------------------------|
| 2 НРБ | 319 | 12.0 млрд ¹¹ | 15.7 млрд ¹¹ |
| 3 УНР | 262.0 | 10.2 млрд | 12.1 млрд |
| 4 КНДР (1970=100) | 100 | 361 | 444 |
| 5 ГДР | 214.0 | 649.0 | 7.8 млрд |
| 6 МНР | 120.5 | 418 | 5.9 млрд |
| 7 ПНР | 254.0 | 9.5 млрд | 8.7 млрд |
| 8 ЧССР | 279.0 | 13.0 млрд | 11.3 млрд |
| 9 СССР | 219.0 | 9.3 млрд | 11.8 млрд |
| 10 ВССР | 200.0 | 6.0 млрд | 7 млрд |

* STATISTICHESKIY YEZHEGODNIK STRAN-CHLENOV SEV
[Statistical Yearbook of CEMA-Member Countries],
1983, pp 17-24.

[For key, see next page]

Key to Table 1:

1. Countries
2. Bulgarian People's Republic
3. Hungarian People's Republic
4. Cuba (1970=100)
5. GDR
6. Mongolian People's Republic
7. Polish People's Republic
8. Socialist Republic of Romania
9. USSR
10. Czechoslovak Socialist Republic
11. fold

In 1960-1982 the foreign trade of CEMA-member countries grew 10.6-fold, their national income 3.3-fold, and industrial production 4.3-fold. For individual countries the overtake ratio of the growth of foreign trade to the national income index varies on average during this period from 2.0 in Romania to 4.2 in Hungary. In our country it equaled 3.5, in the USSR 3.4, in Poland 3.9, in the GDR 3.0, in Czechoslovakia 2.9, in Mongolia 2.1. The foreign trade of some CEMA-member countries developed at a higher rate also than the growth of industrial production. The overtake ratio is as follows: Hungarian People's Republic 3.7, USSR 2.7, Bulgarian People's Republic 2.4, GDR 2.3, Czechoslovak Socialist Republic 2.2, Polish People's Republic 1.9, Socialist Republic of Romania 1.1.⁴

The data show that there is a strikingly pronounced trend for the foreign trade index significantly to lead the growth of national income and of industrial production. The trend is characteristic of the increased role of foreign trade factors in the development of the economy of CEMA-member countries during the 1960-1982 period. The per-capita volume of foreign trade in the individual countries is also an important indicator of the importance of foreign trade (see Table 2).

Table 2

PER-CAPITA FOREIGN TRADE IN CEMA-MEMBER COUNTRIES, in rubles*

| 1. Страна | 1960 | 1970 | 1980 | 1982 |
|-----------|------|------|------|------|
| 2. НРБ | 139 | 406 | 1492 | 1889 |
| 3. НРВ | 165 | 416 | 1940 | 2313 |
| 4. ГДР | 220 | 497 | 1537 | 1860 |
| 5. МНР | 86 | 218 | 697 | 735 |
| 6. ЧССР | 67 | 169 | 762 | 612 |
| 7. СССР | 47 | 91 | 354 | 441 |
| 8. ЧССР | 247 | 470 | 1322 | 1540 |

*Calculated from STATISTICHESKIY YEZHEGODNIK STRAN-CHLENOV SEV, 1983, pp 7 and 313.

[For key, see next page]

Key to Table 2:

1. Countries
2. Bulgarian People's Republic
3. Hungarian People's Republic
4. GDR
5. Polish People's Republic
6. Socialist Republic of Romania
7. USSR
8. Czechoslovak Socialist Republic

From the table it can be seen that the influence of foreign trade is greatest on the economy of the Hungarian People's Republic, the Bulgarian People's Republic, the GDR and the Czechoslovak Socialist Republic. However, although in 1960 the Czechoslovak Socialist Republic and the GDR held the first two ranks within CEMA in respect of this indicator, now Hungary is in first place, followed by our country. Foreign trade's influence on the economy of the USSR, Romania and Poland is comparatively less. The differences between individual countries in respect of this indicator are as great as fivefold, which shows the significant differentiation of conditions under which the reproduction process takes place in the individual CEMA-member countries. The economic literature cites a number of specific preconditions for the participation of individual countries in the international division of labor: the scale of production and domestic consumption that has been reached; the state of supply of primary raw-material and energy sources; the state of development of the scientific and technical base; the state of the labor-resources budget, etc.⁵ Under their combined influence the productive forces of each country develop, and the export and import flows by which it is embraced in the international exchange of goods are generated.

With the development of productive forces, significant changes take place in /the structure/ [in boldface] of the foreign trade of CEMA-member countries. As a whole, they follow the changes in the development of production. Two commodity groups account for the vast bulk of the CEMA countries' exports and imports: machinery, equipment and means of transportation (see Table 3) and fuels, mineral resources and metals.

Machine-building output accounts for a growing share of the export total of the Bulgarian People's Republic, the Polish People's Republic, the Socialist Republic of Romania and the Czechoslovak Socialist Republic, while its share of the exports of the Hungarian People's Republic, the GDR and the USSR is declining. The share represented by this commodity group in the imports of all European CEMA-member countries declined in 1970-1982. The importance of raw-material and energy products grew at the expense of machinery and equipment (see Table 4).

The data show that all the CEMA-member countries (excluding the USSR) are net importers of raw-material and energy products. These products account for one-third to one-half of the individual countries' entire imports. The USSR has significantly increased the proportion of its raw-material and energy exports in the past 12 years.

Table 3

**SHARE OF EXPORTS AND IMPORTS OF EUROPEAN CEMA-MEMBER
COUNTRIES REPRESENTED BY MACHINERY, EQUIPMENT AND
MEANS OF TRANSPORTATION,* in %**

| 1 Страна | 2 Экспорт | | | 3 Импорт | | |
|----------|-----------|------|------|----------|------|------|
| | 1960 | 1970 | 1982 | 1960 | 1970 | 1982 |
| 4 НРБ | 12.9 | 29.0 | 46.9 | 43.9 | 40.6 | 33.9 |
| 5 НРП | 38.6 | 32.6 | 32.3 | 28.5 | 30.5 | 30.5 |
| 6 ГДР | 49.0 | 51.7 | 48.5 | 12.7 | 34.2 | 32.3 |
| 7 ПНР | 28.3 | 38.5 | 46.9 | 27.1 | 36.2 | 25.0 |
| 8 СРП | 16.7 | 22.8 | 33.0 | 33.6 | 40.3 | 26.6 |
| 9 СССР | 20.7 | 21.5 | 12.9 | 31.1 | 35.6 | 34.4 |
| 10 ЧССР | 45.7 | 50.4 | 53.2 | 21.7 | 33.4 | 33.1 |

* STATISTICHESKIY YEZHEGODNIK STRAN-CHLENOV SEV,
1983, pp 317-322

Key:

1. Countries
2. Exports
3. Imports
4. Bulgarian People's Republic
5. Hungarian People's Republic
6. GDR
7. Polish People's Republic
8. Socialist Republic of Romania
9. USSR
10. Czechoslovak Socialist Republic

The other commodity groups account for a comparatively smaller share of the individual countries' exports and imports. Foodstuffs and the raw materials for the production thereof account for about one-fourth of the exports of the Bulgarian People's Republic and the Hungarian People's Republic, while industrial consumer goods are more widely represented in the exports of the Czechoslovak Socialist Republic (16.8 percent), the Hungarian People's Republic (16.5 percent) and the GDR (14.2 percent). Foodstuffs and consumer goods account for over 40 percent of the USSR's imports.

Agricultural and industrial raw materials still predominate in the export structure of the other three CEMA countries (Mongolian People's Republic, Cuba and Vietnam), while machine-building output ranks first in their imports.

Table 4

**SHARE OF EXPORTS AND IMPORTS OF EUROPEAN CEMA-MEMBER COUNTRIES
REPRESENTED BY FUELS, MINERAL RESOURCES AND METALS, in %***

| ¹ C _{CEMA} | ² E _{fuem} | | | ³ I _{em} | | |
|--------------------------------|--------------------------------|------|------|------------------------------|------|-------------|
| | 1960 | 1970 | 1982 | 1960 | 1970 | 1982 |
| ⁴ HPG | 9.2 | 8.1 | 12.7 | 24.3 | 29.1 | 46.2 |
| ⁵ MHP | 12.8 | 14.4 | 13.3 | 27.7 | 23.6 | 29.3 |
| ⁶ GDR | 15.7 | 10.1 | 18.5 | 38.5 | 27.6 | 39.9 |
| ⁷ IRP | 34.0 | 23.9 | 27.1 | 25.3 | 26.6 | 28.8 (1981) |
| ⁸ CRP | 36.9 | 22.7 | 24.1 | 34.3 | 30.1 | 43.5 |
| ⁹ CCCP | 37.6 | 38.1 | 60.8 | 20.0 | 11.8 | 14.9 |
| ¹⁰ CCP | 19.1 | 18.6 | 14.5 | 27.9 | 23.5 | 39.1 |

* STATISTICHESKIY YEZHEGODNIK STRAN-CHLENOV SEV, pp 317-322

Key:

1. Countries
2. Exports
3. Imports
4. Bulgarian People's Republic
5. Hungarian People's Republic
6. GDR
7. Polish People's Republic
8. Socialist Republic of Romania
9. USSR
10. Czechoslovak Socialist Republic

Reciprocal trade plays a fundamental role in the foreign trade of CEMA-member countries. In 1982 it accounted for 55.9 percent of the total foreign trade of CEMA countries.⁶ For the individual countries this percent is differentiated to a significant extent.

The data of Table 5 show that Mongolia's share of commerce represented by reciprocal trade is greatest, followed by Cuba, Bulgaria, Czechoslovakia and the GDR. For the other countries this indicator varies from 43.7 percent in the Socialist Republic of Romania to 54.3 percent in the Polish People's Republic.

Reciprocal trade developed dynamically in the 1970's. The average annual rate was about 14 percent and was higher than the rate registered in the preceding decade (1961-1970).

In the first 3 years of the current five-year plan (1981-1983) reciprocal trade among CEMA-member countries developed at an overtaking rate in comparison with the growth of total trade, as a result of which its share of total trade increased. This present-day trend is characteristic of all CEMA-member countries.⁷

Table 5

SHARE OF TOTAL* VOLUME OF FOREIGN TRADE PER COUNTRY REPRESENTED BY TRADE WITH CEMA-MEMBER COUNTRIES, in %

| Страна | 1970 | 1975 | 1980 |
|---------|------|------|------|
| 1. БНР | 74.1 | 73.6 | 73.9 |
| 2. НРП | 62.1 | 66.1 | 51.7 |
| 3. ГДР | 67.3 | 66.2 | 63.1 |
| 4. КНР | | 55.4 | 61.5 |
| 5. МНР | | 56.2 | 56.9 |
| 6. ПНР | 63.1 | 49.7 | 54.3 |
| 7. СРР | 49.3 | 38.0 | 63.7 |
| 8. СССР | 55.6 | 51.8 | 49.1 |
| 9. ЧССР | 64.2 | 65.9 | 70.0 |

* СТАТИСТИЧЕСКИЙ ЕЖЕГОДНИК СТРАН-ЧЛЕНОВ СЕВ, 1971, p 342; 1976, p 341; 1983, p 315.

Key:

1. Countries
2. Bulgarian People's Republic
3. Hungarian People's Republic
4. GDR
5. Cuba
6. Mongolian People's Republic
7. Polish People's Republic
8. Socialist Republic of Romania
9. USSR
10. Czechoslovak Socialist Republic

The structure of reciprocal trade has significant differences from that of total trade. The most appreciable difference is the significantly greater proportion of machine-building output in the exports of CEMA-member countries than the proportion thereof in total exports. Thus, machine-building output in 1980 accounted for 44.4 percent of Bulgaria's total exports, but 54.3 percent of its exports to CEMA-member countries. In the Hungarian People's Republic these figures were respectively 32.2 and 47.1 percent, in the GDR 51.3 and 64 percent, in the Polish People's Republic 44.5 and 59.9 percent, in the Socialist Republic of Romania 24.9 and 40.3 percent, in the USSR 15.8 and 23.5 percent, in the Czechoslovak Socialist Republic 50.3 and 63.2 percent⁸. Machinery and equipment average over 40 percent of reciprocal trade. The increase in the proportion of finished industrial output, and first and foremost of machine-building output, is a trend manifested throughout the postwar period and differs from the trend towards a relative decline in the proportion of machine-building output in the total exports and imports of CEMA-member countries (cf. Table 3). The trend is

the result of the high rate at which reciprocal trade in machinery and equipment is developing, a rate which is significantly overtaking the growth in the production thereof. The data show that in 1950-1982 industrial production of CEMA-member countries increased 13-fold, machine-building output over 35-fold, but exports of machinery and equipment in the international socialist market over 55-fold. It can be seen that the rate of export of machine-building output to CEMA-member countries is four times the increase in the production thereof and twice as high as the increase in their total reciprocal trade. This trend, although more weakly pronounced, obviously will continue to be manifested in the future as well.

In determining the prospects for the development of CEMA countries' foreign trade, the operation of a number of factors up to the end of the 1980's is taken into account. The first of these is the already-created material and technical base and the established structure of social production in the individual countries. The stable proportions that have been formed in the intersectorial division of labor will have a steadying effect on foreign-trade volume and structure. At the same time, the magnitude of the elasticity ratio between the rate of national income and foreign trade will decline. This is due not only to the present-day trends in the national economic policy of individual countries, but also to certain changes in the trends and necessities of the international socialist market.

The development of the material and technical base in all the European CEMA-member countries will be effected by intensification by the end of the decade. A manifestation of the intensive economic growth is the higher rate of national income than the growth of capital investment. This proportion is produced by planning, and in 1981-1983 the five European CEMA-member countries (excluding the Bulgarian People's Republic and the USSR) achieved an increase in national income simultaneously with an absolute decline in the total amount of capital investment in their national economy. Considering the predominantly investment character of reciprocal trade, it can be expected that the policy of intensive development will result in a lower growth of trade than in the second half of the 1970's. There will be a decline also in the role of finished industrial output, above all of machinery and equipment for production purposes. Of the total amount of capital investment, the vast bulk will be channeled into reconstruction and modernization. This being the case, consumer demand will turn more and more towards the technologies and machinery that are the vehicles of scientific and technical progress. The deficit in the labor-resource budget will be overcome by integrated mechanization and automation,⁵ and the deficit of raw-material and energy output by the introduction of technologies for the intensive processing of raw materials and waste-free production.

An important factor in changing the structure of reciprocal trade under conditions of intensification is the channeling of cooperation away from the additional production of raw-material resources into resource-saving technologies and corresponding machinery, with more end product obtained per unit of raw material. This version of reciprocal cooperation requires less capital investment, makes it easier to solve the raw-materials and energy problem, and is ecologically more efficient. At the same time, these advantages are realized by the socialist community rather than by a country taken singly.

A consistent policy of intensifying machine-building output is being pursued by the GDR, the Hungarian People's Republic and the Czechoslovak Socialist Republic. It finds expression in significantly increasing the volume by worth of exports by means of intrastructural changes, with a comparatively small increase or even a curtailment of the total volume of machine-building output. Thus, in 1980 the exports of machine-building output by the Czechoslovak Socialist Republic grew 2.1-fold over 1970, while the increase of machine-building production was barely 7 percent in all in 10 years. In Hungary machinery and equipment exports grew 2.9-fold with a 28-percent curtailment of production; in the GDR the growth of exports was 1.9 percent and the production decrease 7 percent, respectively.¹⁰ What with significantly more expensive imports of raw materials, fuels and metals, this is obviously one of the ways of increasing the efficiency of exports towards which other countries will be turning during the 1980's.

The policy of intensive development is due to the necessity of constantly raising the efficiency of foreign economic relations. CEMA-member countries more and more are turning towards the rationalization of imports and raising the share of their exports represented by efficient resources. In addition to maximum use of domestic resources, ever greater attention is being paid to the study of and adaptation to international economic conditions and fluctuations of foreign trade prices. Trends in the development of prices in reciprocal trade up until 1990 will continue to be comparatively more favorable for exporters of industrial raw materials, energy sources, agricultural and food, wine and tobacco products. Great price movements are expected for science-intensive finished output, for modern high-duty investment equipment, automation facilities, the output of the robot-building industry, etc.

Individual countries are pursuing their long-term structural policy in keeping with these trends. In our country's exports machine building will continue to have priority. As Comrade T. Zhivkov points out, "... we must strengthen our positions in the export of materials-handling machinery; microprocessor and microintegrated equipment; robots, manipulators and other means for the automation of production; machinery and equipment for the chemical industry, light industry, and the food, wine and tobacco industry; farm machinery. The export of equipment for biotechnologies is especially promising."¹¹

An important factor in the development of CEMA countries' foreign trade is the expansion of their integration processes. Export flows are to an ever greater extent becoming the result of participation in international specialization and subcontracting of production on a multilateral and bilateral basis. In 1986-1990 almost the entire increase of machine-building output in the international socialist market will be due to specialized output.

Reciprocal commodity flows between each of the CEMA-member countries and the USSR will be especially large-scale and dynamic. Conducting thereto will be their bilateral programs (plans) for integration, the division of labor, and the specialization and subcontracting of production. A factor operating in this direction will be the endeavor of each country to balance its exports and imports with the USSR. In the 1976-1982 period the European CEMA-member countries received from the USSR goods exceeding by more than 10 billion rubles the

value of their exports in return.¹² In the next five-year plan, the chairman of the USSR Council of Ministers Comrade N. Tikhonov emphasized at the 37th CEMA session, "... planning and foreign trade bodies in reconciling the volumes, structures and proportions of reciprocal shipments must in the course of coordinating their plans take into account the necessity of more consistent observance of the principle of mutual advantage and the guarantee of balance in their trade and payment relationships."¹³ As a result, further growth of the USSR's role in the foreign trade of the other CEMA-member countries can be expected.¹⁴ This will have a stimulating effect on the development of reciprocal trade in the CEMA system.

Another factor which must be taken into account in determining the prospects for the development of CEMA countries' foreign trade is foreign economic relations with the capitalist countries. The complicated international situation at the beginning of the 1980's and the policy of confrontation adopted by the U.S. administration and other NATO countries, as well as the concomitant economic boycotts and sanctions, have introduced instability into the development of foreign economic relations. The tasks which the CEMA-member countries are performing in the intensification of their economies, the modernization of production, the updating of output and the upgrading of its quality level are a good precondition for the development of mutually advantageous cooperation with the developed capitalist countries. The principled course of the socialist states towards peaceful coexistence, detente and economic relations on the basis of equal rights is along these lines. But the use of political motives, of ideological, "moral" and other categories in the economic relations of the capitalist states with the socialist countries puts serious obstacles in the way of the development of trade. Under present-day conditions CEMA-member countries are turning towards ever closer mutual cooperation and towards solution of their basic economic problems by joint action within CEMA. In this connection Comrade N. Tikhonov has pointed out, "Our community has everything it needs to assure its technical and economic invulnerability. . . . It would be useful to prepare specific proposals for CEMA-member countries to carry out initiatives to organize the collective production of a number of machines, equipments and materials, on the sale of which the West is placing restrictions."¹⁵ The conclusion can be drawn that by expansion of joint production activity the international socialist market will be strengthened and the role of trade with the developed capitalist countries will lessen.

The expansion of economic cooperation with the developing countries will contribute to further changes in the foreign-trade volume and structure of CEMA-member countries. Trade with the developing countries will grow, with a comparatively more rapid increase of imports expectable in order to compensate for the CEMA countries' large credit balances from the trade thus far. The proportion of finished industrial output, package projects and engineering activity in the export structure will continue to grow.

As a result of the combined operation of the factors we have considered, it can be expected that by 1990 the reciprocal trade of the CEMA-member countries will account for about 60 percent of their total trade; 25-27 percent will be attributable to the developed capitalist countries, and 13-15 percent to the developing countries.

The total volume of CEMA-member countries' trade in current prices will double by 1990 over 1980. Its growth rate will be lower than that in the 1970's. This will be due to the slower growth of the quantities of interchangeable commodities (physical volumes) and to the comparatively weaker influence of the price factor. Physical volume will be affected not only by the smaller demand for machinery and equipment (which hitherto have been the most dynamic commodity group in reciprocal trade), but also by the necessity of balancing exports and imports between individual CEMA-member countries, as well as with the developed capitalist and the developing countries.

No significant changes are expected in reciprocal-trade structure. Machinery and equipment will retain their share, the growth of their absolute volumes being due mainly to international specialization and subcontracting in production. Individual European CEMA-member countries (excluding the USSR) will balance the exports and imports of machine-building output among themselves.

Industrial raw materials and fuels' share of reciprocal trade will decline. There will be an increase of shipments by way of integration activities (joint building of projects, dovetailed barter, etc.). Chemicals will be exchanged on a mutually balanced basis. Cooperation will continue to be effected through the exchange of high-energy-intensive output from the USSR for the low-energy-intensive products of the other countries. Reciprocal trade of the product mixes in metallurgy will be developed.

It is expected that the share of agricultural and of food, wine and tobacco products will grow, both in terms of physical volume and value. This will be fostered by the decision of the 37th CEMA session jointly to stimulate their production and export by interested countries.¹⁶

The share of consumer goods will also register a certain increase. The exchange of product assortments will be expanded through ministries of internal trade and central cooperative unions. The range of goods supplies will thus be augmented and consumer demand will be more fully satisfied. The quality of reciprocally exchanged consumer goods will be increased to a significant extent.

These present-day trends in the development of CEMA-member countries' foreign trade will also be reflected in our country's commerce. As an active participant in the international division of labor and a country with an open economy, Bulgaria has a special interest in the stable and systematic development of foreign economic relations and in increasing their contribution to our overall socioeconomic development. As a result, the timely and flexible adaptation of production to the high requirements of international markets arises as a central problem. Special attention is being given to profiting from the most expedient and favorable opportunities in business conditions for export and import activity. All this requires continuous improvement of international market research and progressive structural changes in our economy in conformity with the country's capabilities and the requirements of the world market.

Special attention must be given to the quality of export products since to a decisive degree it affects their competitiveness and efficiency. High quality

demands are increasingly becoming more characteristic of the international socialist markets with which our country is traditionally and deeply linked. The global problems raised by the National Party Conference regarding quality questions must become an operations handbook for every enterprise and economic organization producing export output. Without this there can be no successful and efficient foreign trade sales.

Of special importance for our country is the development of foreign economic relations with other CEMA-member countries, and above all with the USSR. Active participation in integration processes is regarded by our party as an extremely important and powerful factor in the intensive and efficient development of the economy. Preservation of the positions gained in the international socialist market and expansion of the Bulgarian presence therein require that performance of the tasks and commitments assumed towards our integration partners should become the paramount duty of every labor force, of every worker. The development of specialization and subcontracting with the USSR must be on a large scale and must be implemented on both a bilateral and multilateral basis. It is advisable to develop this activity with other countries on a multilateral basis, which offers wider opportunities for stable and large-scale foreign-trade sales.

There must be significant development of teamwork in the third market with other CEMA countries and, mainly, the USSR. The problems of a general character which the fraternal countries are solving require following a coordinated--and in the long term also a uniform--foreign-trade policy towards the capitalist and the developing countries. In this way the CEMA country will be able to oppose more successfully imperialist aspirations in the sphere of foreign economic relations, as well as raise the effectiveness of the assistance rendered to the developing countries.

The guarantee of our country's successful economic development, of its holding a worthy place in international commodity markets and winning the prestige of a sought-after and preferred foreign trading partner, lies in close integrationist cooperation with the CEMA-member countries, and above all with the USSR.

FOOTNOTES

1. T. Zhivkov, "Problemi i Podkhodi na Izgrazhdaneto na Zreliya Sotsializum v NR Bulgariya" [Problems in and Approaches to the Building of Mature Socialism in the Bulgarian People's Republic], Sofia, Partizdat, 1984, p 52.
2. NARODNOYE KHOZYAYSTVO SSSR V 1982 [National Economy of the USSR in 1982], p 55.
3. Over 2500 enterprises, installations and other projects, most of them in industry, have been built with the technical assistance of the USSR in CEMA-member countries.
4. Calculated from STATISTICHESKIY YEZHEGODNIK STRAN-CHLENOV SEV [Statistical Yearbook of CEMA-Member Countries], 1983, pp 17-24.

5. See Yu. Shiryaev, "Objective Principles and Essence of Socialist Economic Integration," in "Sotsialisticheskata Ikonomicheskata Integratsiya--Sushtnost, Problemi, Perspektivi" [Socialist Economic Integration--Essence, Problems, Prospects], Sofia, Partizdat, 1975, p 17.
6. VNESHNYAYA TORGOVLYA [Foreign Trade], 1983, No 7, p 4.
7. It must be borne in mind that the fluctuations of foreign-trade prices affected the growth of reciprocal trade more in the 1970's than in the preceding period. With the introduction of a "creeping" price basis in 1975, prices began to follow more directly the higher rate of world-price movements characteristic of the 1970's.
8. STATISTICHESKIY YEZHEGODNIK STRAN-CHLENOV SEV, 1982; EKONOMICHESKOYE SOTRUDNICHESTVO STRAN-CHLENOV SEV [Economic Cooperation of CEMA-Member Countries], 1982, No 10, p 25.
9. An increasingly larger part of the increase in production will be provided by virtue of labor productivity. During the first 3 years of the current 5-year plan the growth of industrial labor productivity outpaced the increase of industrial output in the Hungarian People's Republic, the GDR, the Czechoslovak Socialist Republic and the Socialist Republic of Romania. Outpacing of this kind is targeted in the USSR, too, in 1984.
10. EKONOMICHESKOYE SOTRUDNICHESTVO STRAN-CHLENOV SEV, 1982, No 10, p 25.
11. T. Zhivkov, op. cit., p 256.
12. Calculated according to VNESHNYAYA TORGOVLYA SSSR [Foreign Trade of the USSR] for the years in question.
13. RABOTNICHESKO DELO [Workers' Cause], 19 October 1983.
14. The USSR's share of the total volume of CEMA-member countries' foreign trade increased from 40.1 percent in 1960 to 44.7 percent in 1982. (Calculated according to STATISTICHESKIY YEZHEGODNIK STRAN-CHLENOV SEV, 1983, p 313.)
15. RABOTNICHESKO DELO, 19 October 1983.
16. Ibid., 21 October 1983.

6474

CSO: 2200/21

KOZLODUY NUCLEAR POWER STATION ANNOUNCES JOB OPENINGS

Sofia VECHERNI NOVINI in Bulgarian 14 Oct 84 (special page)

[Announcement of the Kozloduy Economic Nuclear Power Combine, bearer of the Bulgarian People's Republic Order 1st Class; published jointly by VECHERNI NOVINI and the Reklama Economic Enterprise]

[Text] In connection with the accelerated building and commissioning of the new capacities--the fifth and sixth power blocs--the combine will hire from anywhere in the country qualified specialists with completed higher education in the following areas:

Thermal power industry and nuclear power industry;

Production automation;

Electronic equipment;

Electrical measuring equipment;

Radio electronics;

Computers;

Communications equipment;

Industrial heat equipment;

Electric power industry (electric power plants and substations or electric power grids and systems);

Electric power supply and electric power equipment;

Electrical machines and apparatus;

Technology of metals and metal-processing machines;

Technology of machine-building and metal-cutting machines;

Technology of organic synthesis and fuels;

Water technology;

Mathematics;

Physics--production specialization;

Chemistry--production specialization.

Qualified specialists with completed secondary specialized training (technical school) for the following:

Electronic equipment;

Computers;

Production automation;

Radio and television equipment;

Nuclear electronics;

Electric power plants and grids;

Nuclear thermal power industry;

Electrical equipment of industrial enterprises;

Semiconductor equipment;

Communications equipment;

Thermal and hydroenergetic machines and equipment;

Internal combustion engines;

Machine-building technology--cold metal processing;

Technology of organic synthesis and fuels.

Qualified performing cadres with completed secondary vocational technical training (SPTU) for the following:

Electronic equipment assemblyman;

Power machine units assemblyman;

Machine assemblyman;

Electric power grids and systems assemblyman;

Electric power machines, equipment and apparatus assemblyman;

Control measuring equipment assemblyman;

Operator--assemblyman for power industry installations;

Operator--assemblyman for metal-cutting machines;

Operator for chemical-technological processes;

Welder.

The nature of the work at the Kozloduy SAEK [Economic Nuclear Power Industry Combine] requires of the applicants to show more than an average interest in the equipment and abilities in their chosen profession as well as a high degree of discipline and personal responsibility in the work.

The need for high professional skills will require for some of the personnel hired by the Kozloduy SAEK and specialists to be sent to the USSR and other socialist countries for training and specialization.

Wages will be based on the differentiated rate schedule for the third group (ETM with a 20 percent surplus).

Additionally, those hired will be given the following salary additions: no more than 40 leva as per Article 9(1) of the directive on additional labor wages (NDTV) for work under specific conditions;

No more than 40 leva as per Article 35 of the NDTV for manpower stabilization;

No more than 20 percent for lengthy and uninterrupted work--second group (for grade workers);

No more than 60 percent additional wage (labor participation coefficient).

Depending on the nature and place of work, specialists may retire between the ages of 50 and 55.

The Kozloduy SAEK offers the following advantages:

The children of the personnel have priority in entering secondary specialized schools (technical schools) and SPTU;

Priority is given in granting scholarships to children of combine workers attending VUZs, technical schools and SPTU;

Permission is issued for enrolling as correspondence students in higher educational institutions;

Possibilities are provided for regular and correspondence postgraduate studies in the country and abroad;

The opportunity is offered for enrolling in a VUZ by graduates of secondary specialized or secondary vocational-technical schools, for whom 8-month preparatory courses will be organized.

Social Benefits

The Kozloduy SAEK provides to those hired:

Apartments, based on family size;

Apartments for singles;

Daily free transportation;

Official transportation for commuters from the area's settlements;

Nutritious food in the cafeteria;

Rest vouchers for the enterprise's bases on the Black Sea and other tourist sites;

Additional annual leave of up to 22 working days.

The following documents must be presented by the applicants: petition, curriculum vitae, diploma proving completion of higher, secondary specialized or secondary vocational technical training in the corresponding subject, certificate of skill grade, regulation form health certificate, labor record and personal form (approved model).

Documents will be accepted every day at the personnel department of the Kozloduy SAEK, first floor, and the vocational training center, ninth floor.

For information you may call from anywhere in the country telephone code 0973-71--Kozloduy SAEK telephone switchboard; personnel extension 26-62; vocational training center extension 20-31 and 20-32. The address is the following:

Energetika Corporation, eighth floor, room No 813, No 8 Triyaditsa Street, Sofia. Telephone No 87-00-19 or 86-191, extension 273.

5003

CSO: 2200/24

EFFECTIVENESS OF CREDIT DIFFERENTIATION EVALUATED

Prague FINANCE A UVER in Czech No 7, 1984 pp 441-449

[Article by Eng Frantisek Krejca: "Effectiveness of Credit Differentiation in 1983"]

[Text] The achievements of 1983 contributed to a successful completion of the goals and tasks of the economic policies stipulated by the 16th CPCZ Congress. The positive tendencies in the fulfillment of our national economic plans were enhanced. Our economy marked a more dynamic development, the consumption of materials and energy in the creation of national income was reduced, efficiency of production was upgraded, and the high living standard of our population maintained. Such accomplishments were achieved despite the aggravated international political and economic situation. Positive trends in the fulfillment of the state plan for the development of our national economy made it possible to fulfill last year the main objectives in currency stabilization according to the currency plan of the CSSR.

The following trends in the development of currency may be regarded in part as positive:

--Our debt in free exchange was further reduced. Imported inputs in our economy were cut, while maintaining the continuity of the process of replacement by utilizing hidden assets in our economic sphere. After an extended period the plan for exports to nonsocialist countries was again fulfilled;

--As compared with past years, the flow of credits was slowed down. Its growth approached the rate of growth of gross national income (gross national income in current prices + 2.7 percent). The directives on credits stipulated by the CSSR Government were observed (directive + Kcs 20.6 billion, reality + Kcs 19.1 billion). The structure of credits granted as well as their use for the promotion of accelerated dynamism and more efficient production improved;

--The needs of the exchange plan in our domestic and foreign relations were covered with assets from our domestic economy, especially from personal savings and unrestricted funds of the enterprise sphere. Savings of our population exceeded the plan, which helped consolidate our domestic market.

Financial Management of State Economic Organizations

The achievements in the area of enterprise finances were also favorable. In 1983 our state economic organizations reported overall improvement in the level of efficiency of management, which was reflected by the rapidly increasing profits--index 113.4--as compared with actual results of 1982, and by their planned volume, which was exceeded by 6.9 percent. Furthermore, the dynamic development provided conditions for higher intensity of savings of total costs. As compared with 1982, the share of all main types of costs in the achieved volume of outputs declined. Considerable savings of materials costs were achieved. Their share in outputs was 0.82 points below that of 1982. Savings of costs served as a major component--approximately 57 percent--of the achieved profits which were higher than planned. Favorable results in the development of costs and profits were reflected in profitability, which was 0.9 points above the plan (the plan for 1983 stipulated profitability of 11.3 percent). The volume of outputs was 1.6 percent higher than planned and 3 percent higher than the actual results of 1982. More sectors of production reported excellent fulfillment. The development of basic tasks of the financial plan in 1983 is presented in Table 1.

Table 1

| State economic organizations | Index 1983/1982 |
|------------------------------|-----------------|
| Volume of outputs | 103.0 |
| Total costs | 102.0 |
| Material costs | 101.6 |
| Profitmaking | 113.4 |

Application of Differentiated Credit Policy in 1983

In 1983 the Czechoslovak State Bank continued to pursue the objectives of the Set of Measures, particularly pressure for intensification, efficiency and the qualitative aspect of production, and mobilization of all accessible assets in our economy. It enforced differentiated credit policies and thus rendered full support to the efficient fulfillment of the plan. It granted credits with priority to rapidly returnable programs strengthening our balance of payments, to programs focused on modernization, automation and robotization of production and on conservation of fuels, metals and energy, on R&D and expeditious introduction of its achievements in production, as well as on further improvement of the quality of the structure of inventories, increasing the share of market supplies and consolidating the consumer-supplier relations.

It effectively supported progressive tendencies and at the same time intensified pressures to eradicate shortcomings in our national economy by restricting credits to inefficient organizations from the spreading insolvency.

In 1983 the Czechoslovak State Bank reinforced the positive aspects of its credit policies, giving preference to credits for profitable goods capable of competing in international markets. Certain new measures were introduced in credits for inventories in order to accelerate their turnover more effectively, to disclose hidden assets in the inventories and to utilize them. On principle, inventories without ensured marketing would not be granted credits, and the conditions for granting credits to marketing organizations were made more rigorous. The type and justification of seasonal and temporary inventories were examined more systematically. Credits were used to exert greater pressure on the continuity of the production, marketing and invoicing. On the whole, credits became more differentiated in the case of inventories, credit aid and credits not paid on schedule, in the sense that--pursuant to CSSR Government Decision No 322/82 on the exchange plan of the CSSR for 1983--the interest charged for such credits is of a punitive character and in linkage with the volume of wages payable of the organization to which the credit was granted. Measures focusing on the solution of insolvency and on greater differentiation of credits were also specified for the sectors of payment relations and accounting. The impact of interest penalties was rendered more stringent and the principle was applied that such interests (rebates) become addable (discountable) items to (from) profits in the calculation of the base for the determination of taxes payable to the state budget. At the same time, their share and their interrelation with the sector of wages payable increased from the original 25 percent to 50 percent. The focus on progressive and efficient investments was intensified in investment credits. Highly progressive investments above the limits of the investment plan were made possible by the accumulated surplus.

Results of Efficient Operations With Credits

In 1983 the participation of the bank in the fulfillment of the tasks of the state plan was further intensified in the plans of the VHL's [economic production units] and enterprises, including the effect of the bank on a steady as well as more consistent fulfillment of quarterly tasks. Bank officials directed their attention above all to the financial plan and to assessments of the requirements for the fulfillment of the tasks of the CSSR exchange plan. At the same time the level of, and the realistic projection for, the fulfillment of the remaining parts of the plan and material tasks as well as their implementation were reviewed. More attention was focused on contracts in credit relations with the VHL's and organizations. As compared with the past years, there were fewer controversies and unfulfilled tasks in the stage of the preparations and specifications of the plan. Relatively good results were achieved by exerting pressure for more balanced production and marketing. On the other hand, in spite of the applied measures, the development of inventories and especially of operational credits was marked by considerable semiannual fluctuations in the plan and in its actual fulfillment.

During 1983 operational credits increased disproportionately above the annual credit directives by as much as Kcs 11 billion at the end of the year. In November 1983 the increase of operational credits still represented almost double the annual credit directive. The volume of credits undesirable in terms of exchange amounted to Kcs 11.7 billion in industry and construction, including Kcs 7.8 billion in machine engineering.

In 1983 the bank further intensified the application of the criteria for efficient use of credits. Particularly effective was the application of general criteria expressing the relation to global indicators of efficiency of the organizations benefiting from the credits, such as decisive directions for the economic determination of marketing, the quality and upgraded value of production, and fulfillment of the mandatory indicators of the state plan. The application and efficiency of partial criteria related to individual types of currency and investment categories improved. In 1983 the bank further specified the specific use of consolidation credits as a form of long-term credit aid to organization with serious chronic shortcomings and ensured greater involvement of higher authorities.

Effect of the Bank on Optimum Development of Inventories

The main activity of the bank in 1983 was reflected in its impact on the area of inventories as the main object of crediting. Certain new measures which have been introduced are focused on accelerating the turnover rate of inventories, on the disclosure of hidden assets in inventories by sorting them out and recycling them, and on balanced fulfillment of the production and marketing plan. As for the inventories carried over from 1982, more attention was paid to their utilization in 1983 by appropriately curtailing procurement or by offering them to other organizations that may be able to find some use for them.

The principle of denying credits for inventories without guaranteed marketing of finished products as well as for goods in the production stage was systematically applied. By the same token, the bank paid more attention to the implementation of the planned directions for marketing for final consumption, based on guaranteed marketing of the goods. Thus, it forestalled the development of production without guaranteed marketing. To prevent unjustified transfers of inventories from manufacturing enterprises to supply and marketing organizations at the end of the year, the central regulation on inventories was extended in 1983 by the indicator of inventory turnover rate in days to the inventories of marketing and supply organizations. Rigorous crediting of inventories in those organizations corresponded with that measure. By more stringent assessment of seasonal and temporary crediting of inventories, the bank prevented the concealment under their cover of inventories needed constantly or unnecessary stocks stemming from the shortcomings of manufacturing and supply organizations.

Credit differentiation was expanded to credits for inventories in relation to the long-term development in accelerating or decelerating the rate of inventory turnover, namely from the 4-8 percent range to the 3-10 percent range. The development of inventories was affected by the measure which replaced the hitherto uniform interest rate on credits unpaid on schedule by a 10-15 percent interest rate, and by projecting the interests on that credit in the volume of wages payable.

A Critical View of the Actual Development of Inventories in 1983

The objectives of the plan have not been met in terms of full utilization and development of the inventories; nevertheless, some partial positive trends have been achieved in that direction. Inventories of the centrally managed state economic organizations increased in 1983 to Kcs 9 billion, while the plan had envisaged an increase of Kcs 2.2 billion. In comparison with actual results in 1982, the increase declined by Kcs 2.3 billion.

It is encouraging that the creation of inventories in our national economy was better distributed. Above all, the creation of inventories in our agriculture contributed toward the overall increase; the inventories of the organizations of the ministries of agriculture and food increased by Kcs 4.8 billion (in 1982 by Kcs 5.3 billion) and inventories of our domestic market increased by Kcs 1.8 billion (in 1982 + Kcs 2.7 billion). To a lesser extent, the organizations of the ministries of industry and the ministries of construction share in the overall increase of inventories with Kcs 1.6 billion (in 1982 + Kcs 2.3 billion)--see Table 2.

Table 2

| Total inventories (without equipment of construction sites and uninvoiced works and supplies) | Currency Plan for 1983 | Actual 1983 | In billion Kcs | |
|---|------------------------|-------------|----------------|----------------------------------|
| | | | results 1982 | Deviation from the plan for 1983 |
| Centrally managed SHO [state economic organizations]--total | +2.2 | +9.0 | +11.3 | +6.8 |
| of which: | | | | |
| Industry and construction | -1.4 | +1.6 | +2.3 | +3.0 |
| MzVz [Ministry of Agriculture and Food] | +2.6 | +4.8 | +5.4 | +2.2 |
| Domestic market | +0.3 | +1.8 | +2.7 | +1.5 |
| Foreign trade | +0.2 | +0.4 | +0.3 | +0.2 |
| Other | +0.3 | +0.4 | +0.6 | +0.1 |

In the branches of industry and construction, the structure of inventories partially improved. Inventories of materials increased at a slower rate than in the preceding year--+1.5 percent in 1983, +1.7 percent in 1982.

The development of the criterion for exchange in the area of inventories had been unfavorable over an extended period, but in 1983 it improved. The inventory turnover rate in the organizations of industry and construction was accelerated by 2 days (in 1982 it had decelerated by 0.1 days), yet the planned task of acceleration by 2.8 days could not be met.

Moreover, the undesirable trends of unbalanced development of marketing, production and inventories could not be mitigated. In 11 months of 1983 the inventories in industry and construction increased by Kcs 10.1 billion; in December they declined by Kcs 8.5 billion. A decline was noted in goods and unfinished products alone--their inventories decreased by a total of Kcs 8.7 billion in December of 1983.

All through 1983 inventories declined at the end of the quarters and grew rapidly in the following months. The fact that their development deteriorated in comparison with the previous year is significant--see Table 3--and confirms a greater imbalance in the production and marketing.

Table 3

in billion Kcs

| | | | | | |
|----------------|------|---------------|------|-----------|------|
| December 1982 | -6.5 | March 1983 | -3.4 | June 1983 | -5.7 |
| January 1983 | +2.8 | April 1983 | +5.4 | July 1983 | +8.1 |
| September 1983 | -5.9 | December 1983 | -8.5 | | |
| October 1983 | +5.4 | January 1984 | +7.3 | | |

According to the bank's information, the above-mentioned fluctuations in inventories reflect above all the overall imbalance in production and marketing, in particular the undesirable "rush work" at the end of every quarter. The basic planning period to which the related mechanisms (material incentives, supplier-consumer relations, etc.) are adapted is the calendar year divided into quarters. For that reason at the end of every quarter, especially the fourth, the economic sphere tries as much as possible to fulfill the plans for production and marketing which are the decisive indicators for material incentives of the managers or which determine the fulfillment of other indicators to which material incentives are related (adjusted value added, inventory turnover). In many instances this effort turns into unjustifiable and unhealthy "rush jobs" at the end of every quarter. This situation is obviously affected by the accounting principles, which fail to set firm and uniform mandatory schedules in which the consumer organizations must report the deliveries received at the end of a quarter in their accounts for that particular quarter. Furthermore, such a situation is affected by the method of calculation of inventory turnover in days based on the actual final situation of inventories on a specific date (31 December) in relation to outputs.

The volume of the production with lagging or unfulfilled marketing declined to a minimum toward the end of 1983; however, we must bear in mind that during the year inventories of products and goods without fully guaranteed marketing in industrial and construction enterprises ranged from Kcs 1.1 billion to 1.2 billion. As late as on 30 November 1983 such inventories amounted to Kcs 0.8 billion. Toward the end of 1983 it was ascertained that total stocks of products with reduced sales or unguaranteed marketing amounted to Kcs 542 million. Products in the category of finished goods were lagging most of all.

Several organizations in the ministries of industry and construction failed to meet the plan for the utilization of assets in inventories. Inventories from previous years were used and then replaced by unnecessary newly created inventories. Thus, sufficient space was not created for the accumulation of inventories that are necessary for the fulfillment of production tasks and that would not exceed the limits of the plan.

According to the plan, the assets from the inventories from previous years scheduled for utilization were estimated at Kcs 5.6 billion. At the same time, it was envisaged that new inventories in the value of Kcs 4.2 billion would be accumulated for the fulfillment of planned tasks. More inventories from previous years were used than planned, since assets amounting to Kcs 5.9 billion from the unused, discontinued inventories had been utilized. However, the actual creation of new inventories amounted to Kcs 7.5 billion, i.e., Kcs 3.3 billion above the plan.

The Development of Operational Credits

The following positive results were achieved in the development of operational needs and resources:

--The structure of operational credits was improved (more than one-fifth of credits undesirable in terms of exchange had been repaid);

--By the same token, the structure of operational needs, especially inventories in national economy, was improved;

--The standard of utilization of the inventories in our industry and construction was upgraded by their accelerated turnover.

The volume of operational credits granted to economic organizations in 1983 increased by Kcs 11 billion.

A review is presented in Table 4.

In 1983 the bank granted to industrial and construction enterprises credits above the limits of the planned increase for desirable supplies, particularly for solid fuels, gas, scrap metal and iron ore, raw materials and materials for consumer industry from imports, and for pre-production within the framework of the implementation of the nuclear program.

Table 4

In billion Kcs

| | Exchange Plan 1983 | Actual 1983 | results 1982 | Deviations from the plan for 1983 |
|---|-----------------------|----------------|-----------------|---|
| National economy--total | +10.4 | +11.0 | +7.6 | +0.6 |
| of which: | | | | |
| Industry and construction | +3.0 | +4.3 | +2.7 | +1.3 |
| Agriculture, including JZD [unified agricultural cooperatives] | +3.4 | +3.9 | +3.7 | +0.5 |
| Domestic trade, including SSD | +0.9 | +1.6 | +1.6 | +0.7 |
| Foreign trade | +1.8 | +0.8 | -1.0 | -1.0 |
| other | +1.3 | +0.4 | +0.6 | -0.9 |

A positive development may be seen in the fact that the negative trends in the development of operational needs and resources for their financing were weakened and our economic organizations, especially industry and construction, improved their solvency. In 1983 the bank made it possible to ease the tension between the needs and the resources of our enterprises and to improve their solvency by introducing stricter, differentiated credit and interest procedures, in order to promote with the greatest efficiency maximum final consumption of the products and increase the creation of internal resources--under the conditions of the growing dynamism of the production. In addition, this involved measures to reduce the volume of restricted funds in accounting and to accelerate payments. The well planned measures and close cooperation with the khozrashchet economic sphere produced good results. While in the beginning of 1983 the volume of delayed payments to suppliers amounted to Kcs 14.1 billion, toward the end of 1983 it declined to Kcs 8.1 billion, i.e., by Kcs 6 billion.

The volume of delayed payments is due mainly to the shortcomings in the management of the enterprises, for which the term "primary causes of payment difficulties" is used. As a matter of fact, in 1982 the bank already applied operational measures in the grants of credit aid and thus prevented a chain reaction of payment difficulties from spreading to supplier enterprises. At the beginning of 1983 the volume of credit aid granted for that purpose amounted to Kcs 12.3 billion. In the course of 1983 Kcs 2.1 billion of the credit aid were repaid.

Penalties raising the interest rate were applied in 13,300 cases of operational credits, and total penalty interests, which amounted to Kcs 326 million, affected wages payable of the organizations in question in the amount of Kcs 163 million (in 1982 to Kcs 227 million), which confirms that there were fewer instances of inability to pay over a shorter period. The bank demanded prepayment of bank credits in the amount of Kcs 780 million due to inefficient use and to nonfulfillment of credit conditions. On the other hand, the bank lowered the interest rate--interest rebate--in 1,057 cases with total interest rebates of Kcs 56 million.

Credit Differentiation in Financing of Replacement of Capital Assets

Certain improvements took place in capital investment in 1983. The annual plan for capital investment was overfulfilled by 4.7 percent, i.e., Kcs 6.4 billion (in 1982 by 1.4 percent, i.e., Kcs 1.9 billion). In addition, more facilities were delivered for operation and the annual plan was 86.2 percent fulfilled (in 1982 only 74.5 percent). The volume of investments in general was highly exceeded; however, considerable differences appeared in its structure. The tasks in the sector of building projects with budget costs under Kcs 2 million and of machinery not included in the budget were overfulfilled by 11.8 percent (absolute overfulfillment by Kcs 6.5 billion), while the tasks concerning construction projects with budgeted costs over Kcs 2 million were only 98.3 percent fulfilled and the reported shortfall was equal to Kcs 1 billion. By the same token construction projects of the mandatory tasks type were fulfilled more satisfactorily at 99.2 percent, as reported, and with a shortfall of Kcs 0.3 billion. During 1983 the number of buildings under construction was cut by 3 percent and the rest of the costs budgeted for the building projects under construction were reduced by 3.2 percent.

Bank audits in 1983 resulted in Kcs 3.4 billion savings in investment costs, or 0.71 percent of the audited amount of budgeted costs.

Furthermore, in 1983 the bank focused more attention on the pre-fulfillment stage of capital investment and on the process of inclusion of construction projects in the plan. In its review of the preparations and efficiency of 562 construction projects for launching in 1984, the bank rejected 85 building projects because they were either not adequately planned or failed to meet the criteria of efficiency; the bank demanded that such negative phenomena be avoided.

In addition, the bank prepared an analysis of approval of facilities in terms of their planning according to the start-up curve. In 1983 specific projects of the state plan failed to meet the volume of production by Kcs 14.8 billion because the indicators of the project had not been fulfilled. One-half of 60 specific projects of the state plan assessed in 1983 failed to comply with the planned parameters, and the overrun of the production costs for their construction was Kcs 3 billion.

The development of needs and sources of capital investment was characterized by the following:

--Investment credits for the financing of capital investment were used to better advantage than in the preceding years;

--Internal resources of investment organizations financing the investments were used more efficiently than planned and than in the actual situation of the preceding year;

--Structural deviations from the plan appeared in individual investments.

Of the planned increase in investment credits amounting to Kcs 7.7 billion, Kcs 7.3 billion were spent (investment credits increased by Kcs 3.1 billion in 1982). As of 31 December 1983 investment credits amounted to Kcs 143.3 billion.

The volume and structure of investment credits in the national economy in 1983 are characterized by the data in Table 5.

Table 5

In billion Kcs

| Investment Credits | Changes of the situation in 1984 | |
|---|----------------------------------|--------|
| | Planned | Actual |
| Long-term investment credit | 5.7 | 6.1 |
| Credits in payback foreign exchange | 1.2 | 0.9 |
| Investment credits for single-purpose machinery | 0.8 | 0.3 |
| Total | 7.7 | 7.3 |

In agreement with the tasks stipulated by the Eighth Plenum the CPCZ Central Committee, the bank intensified measures promoting the fulfillment of R&D. In 1983 credits with preferential interest rates were granted to advance modernization, rationalization and other rapidly returnable investment programs promoting the conservation of raw materials and energy, raising labor productivity and earning foreign exchange. Since 1983, credits with preferential interest rates have been expanded to single-purpose machinery manufactured by certain industrial organizations themselves for the modernization of their own technological base.

By the same token, the bank used credits in payback foreign exchange for the import of machinery and equipment from nonsocialist countries. In 1983 106 credits in payback exchange were granted and the total value of imports was Kcs 1,023 million in prices quoted as "all charges paid" (FC). Those actions contribute annually Kcs 935 million in FC for exports, and savings of imports amount to Kcs 205 million in FC. Thus, the amount of foreign exchange earned with approved credits in payback foreign exchange amounts annually to Kcs 1,140 million in FC. Such credits of returnable foreign exchange are repaid on the average in 1 year.

Licenses and contracts of cooperation in production with nonsocialist countries are concluded on the basis of foreign exchange approvals by the bank, and their purpose is to accelerate R&D. With 15 new agreements on cooperation concluded in 1983, the number of such contracts increased to 92, and the projected transaction amounts to Kcs 876 million in FC.

The mechanisms applied by the bank in the sector of financing the replacement of capital assets is reviewed in Table 6.

Table 6

| | 1983 | |
|--|-------------------|-------------------------------|
| | (Number of cases) | (million Kcs) |
| Credits denied | 224 | 738 |
| Interest rate raised | 3,541 | 100 |
| Prepaid penalty installments on investment credits | 55 | 113 |
| Termination of subsidies drawn from the state budget | 262 | 269 |
| Financing terminated or not commenced | 2,597 | 903 (number of organizations) |
| Reduction of the fund for development | 42 | 75 |

Summary

In 1983 the method of credit differentiation was stabilized and, to some extent, intensified. In practical implementation it reacted to a specific situation of efficient application of bank credits granted to individual credited organizations. Operations involving credits, interest and foreign exchange made further progress.

The above-mentioned positive achievements notwithstanding, one must not overlook the fact that in a number of credit approaches it was assumed that everything was not well as concerns scrupulous implementation of the method of credit differentiation.

Bank managers were thus far unable to proceed really vigorously with the application of the differentiated policy. In fact, organizations receiving credits should feel far more acutely that the bank may grant flexible credits which represent a contribution to the dynamic development of our national economy and which promote progressive trends leading to efficiency.

On the other hand, it also should be stressed that the reaction to negative phenomena and shortcomings must be more consistent and impressive. In this respect the intensity of the mechanisms applied by the bank failed in some instances to equal the extent of the deficiencies in the management of the organizations receiving the credit and to the need to exert more pressure in order to remedy that situation.

Often enough the pressure for eradication of the shortcomings has been undercut because credit agreements between the bank and the organization in question were concluded too late. Moreover, the negative effects also stemmed from the fact that when the proposals for the plans of the enterprises were drafted, tasks that were not sufficiently progressive were adopted, the timetable for the planned tasks was not properly balanced

over the year and their lumping in the last quarter of 1983 was tolerated. In certain instances the terms of the credit agreements were not demanding enough, and thus such contracts failed to serve the bank as appropriate tools to exert pressure on the management of the organization receiving credits for improvement and for a steady fulfillment of their planned tasks.

An analysis of the fulfillment of the exchange plan of the CSSR for 1983 confirmed that the bank's stipulated policies must be implemented systematically, uniformly and with greater differentiation. This year bank officials will apply methods of credit differentiation, and thus assume a more aggressive attitude toward the shortcomings in organizations receiving credits. Following this more rigorous policy, they will make more thorough analyses in order to acquire data about the roots of the shortcomings and deviations from the planned development. At the same time, bank officials will grant credits more efficiently and flexibly in order to promote more effective economy. In credit transactions bank officials will efficiently use total volumes of the credits granted—not with the changes (increase) of specified credits alone.

To create conditions necessary for credit differentiation, to have an effective impact, a policy was stipulated, calling for balanced use of credits during the compilation and review of enterprise plans and while contracting credit agreements. Economists of the bank who participated in the drafting of economic plans enforced economically justified minimum intra-annual deviations from the planned tasks toward the end of the year. Their objective was to balance the development of operational needs, primarily supplies, and thus to avoid the need of high credits.

The management of the bank stresses the effort to raise the implementation of credit directives to a qualitatively higher level. That is not only a question of applying the stipulated credit directive, but of applying it economically. The demand to fulfill the tasks of the credit plan economically is based on the premise that, next to the implementation of items specified in the credit directive, credits must affect more efficiently above all the overall management of the organization receiving the credit, which also means strengthening its ability to pay as well as the very development of values credited as objectives of crediting.

9004

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MINISTER DISCUSSES INDUSTRIAL POLICY PROBLEMS

Budapest PENZUGYI SZEMLE in Hungarian No 8-9, Aug-Sep 84 pp 601-606

[Article by Laszlo Kapolyi, Minister of Industry: "Timely Issues of Industrial Policy"]

[Text] The Society of Hungarian Economists and Hungarian economists not only recognized--and were among the first to do so in the world--but also continuously and attentively follow those changes which Hungarian economic science considers as the beginning of a new era for the world economy. We are witnessing fundamental changes in the relations of supply and demand, in the market mechanism, and in price ratios. Nowadays, an explosive development is taking place in the field of technology which utilizes the full arsenal of the scientific-technical revolution. Social resources--manpower as well as capital--may be used with significantly more efficiency than to date. The strategy of every national economy, and also every component of the national economy, including enterprises, must again and again be reconsidered in a qualitatively changed environment amidst the given parameters of the combined effects of the economic and social transformation taking place in the world.

For precisely this reason, the leadership of industry, and so too the enterprise collectives, greeted with great pleasure the Central Committee's resolution regarding the further development of the economic mechanism which will change, i.e., expand and make more flexible, their economic scope. A new division of proprietary rights is evolving between the state and enterprise, and this will accelerate and ease the accommodation of both state and enterprise to the new situations. Simultaneously, the greater scope makes more stringent demands on industry. However, strategic thinking and planning are developed and become possible if a regulatory system is developed which induces and sometimes forces, intelligent action, but does not overregulate.

To this end, it is necessary, on the one hand, to dismantle the regulatory restrictions as soon as possible and to the greatest extent, and on the other hand, to introduce the scientific results and the qualitative aspects of technical and human factors into the industrial developmental process as quickly as possible.

Concurrent with the recognition that a new era of the world economy is beginning, Hungarian economists have called attention to new forces propelling growth

such as structural changes, rationalization, technical development, and learning and education. During this time there evolved the necessary changes in attitude which take into consideration and further develop the economy in all its intricacy, which means that technical development and the economic mechanism moving with it must represent one system. The ideas heard at the introductory lecture which also came up at the sectional presentations at the conference simultaneously influence the agenda and developmental goals for the national economy and the sectorial sphere. If the various individual branches of industry, enterprises, and cooperatives deal well with this, the result could be more efficient management and greater output, the national income originating from industry could grow faster, and thus greater resources could be created for development than were available to date.

The shrinking of quantitative resources for expansion is a world phenomenon; indeed, the first signs of the beginning of the new age called attention to this. Consequently, permanent changes have ensued in cooperative efforts and international trade. Combined strategies have been developed. We would like to remind you that in the final analysis the times have vindicated those world models which predicted the offsetting of difficulties with technical development. Modern technology has solved problems such as the production of very deep hydrocarbons and the utilization of the ocean floor for the production of energy resources. Oil-substitution technologies have developed extensively which limited the increase of oil prices. Today, a technological generation has already been brought up which provides the means for continued energy- and raw materials conservation. The explosive technical development relying on the results of the scientific-technical revolution today presents us with new demands where newer qualitative factors must be put into the service of industrial development. We must comply with demands such as quality, quantity, selection and above all, precision.

Industry's value producing capacity may contribute more to the national income if we simultaneously increase the efficiency of the utilization of resources, both the productivity of manpower and the effectiveness of capital. In the interests of this, the cost sensitivity of enterprises must be increased and we must move further in material and energy conservation, and existing technical and intellectual capabilities must totally be put into the service of technical development as soon as possible. Industry must create a supply market in the interests of developing a realistic competitive situation. In a competitive situation, the price formation will mirror the real quality and timeliness of the product and the true technological level behind the product, or rather, the production structure. Thus, it becomes possible to avoid or preclude the masking by profit of an unjustified rise in costs, and it simultaneously reinforces the enterprises' sensitivity to quality while improving technological discipline.

This is how it is possible to have industry assume an increasingly greater role in the interests of ensuring internal and external equilibrium, and simultaneously, with its dynamism, lay the foundation for the possibility of stronger economic growth by the implementation of development in designated zones, breakthrough points and tractive sectors based on the principles of defined selective development; or rather, it should contribute to more vigorous

industrial growth by more intensive industrial development in the designated areas.

Thus, we must ensure the equilibrium of today, and at the same time, we must attain a stage of industrial expansion which could also satisfy the requirements of tomorrow's equilibrium.

We must increase the industrial contact with the international division of labor; we must search for those world market processes which, in conjunction with technical development, could expand industry's participation in both capitalist and foreign trends. Within this, industry should contribute more significantly to the further strengthening of our national economy's connections with foreign economy. Exports could also undergo dynamic growth. However, for this to occur, it is also necessary to increase imports, albeit more moderately.

However, in connection with this, we must mention a few concerns. All these tasks must be formulated with regard to industry when the restrictions regarding social resources are perhaps the strongest. For precisely this reason, the slowing down of the technological modernization of industrial processes and the narrowing of opportunities presents serious concerns for industry. The percentage of new machines compared to the gross value of all machines in the machine industry declined from 14% in 1976 to 10% in 1983, in light industry from 14% to 6%, and in the chemical industry from 11% to 7%; thus, the technological exchange slowed down precisely when it was most needed. In the electric energy industry, 80-90% of the installations predate 1978; consequently, the electric energy industry is unable to escape from the energy policies of an earlier time which based the expansion of electric energy production capacities on hydrocarbons and postponed the building of nuclear reactors. This is not a judgment of that era, but an explanation of the present situation in which hydrocarbons represent approximately 50% of the fuel burned by the existing generating stations. Approximately 40% of the technical installations of our metallurgical industry predate 1975 and similarly 47% of our chemical and light industry installations predate 1975. The experts working in industry are familiar with the main trends of technical development in the world. The backwardness is not a consequence of the lack of realization, but rather, the logical consequence of the limitation of resources needed for change.

Naturally, there are a few areas where industry must undergo an attitudinal change. The manufacturing of new machines is one such area. The yearly proportion of new products in production is 2.2-2.4%, and what is perhaps even more noteworthy is that approximately 90% of the new products are made under internal development and private license. Therefore, it is very important that in the technological transfer, we reach a qualitative change in the utilization of new results as soon as possible. In the interests of increasing the competitiveness of industry, research and technical development must be connected more closely and in a more organized fashion with the future marketability and the expected market capacity of the product or technology to be developed. Therefore, wherever research-intensive production activities are being carried out, market research, research activities,

development and technological renewal must also be unified. Research capacities must primarily be strengthened in those enterprises where it is warranted by the nature of production and the degree of research demand.

In addition to better utilization of domestic research by the enterprises we must also expand the scope of licenses and know-how acquisition and we must decrease the transit time for license naturalization. The selection of licenses to be acquired must rely on well-founded marketing policy and the necessary means (investments) for marketing and conditions (background industry, technical level, etc.) must be at our disposal. The purchased licenses must be further developed and the domestic research base must be made to have an interest in this. Primarily, the further development of licenses must be supported.

The fundamental issue with regard to the future is the present-day state of industry and its various branches, and an ability to respond to the technological challenges. The fundamental traits of our present-day fixed assets structure and thereby our production structure was determined by the developmental policy decisions of the previous decades; the structure of industry at the turn of the century depends on our decisions. Thus, industrial development must accommodate to present-day demands with the added responsibility of shaping the face of tomorrow. A good indication of the direction of change is given on the one hand, by changes which have come about in the world, and on the other, by our domestic capabilities.

The effects of the two-fold price increase in raw materials, or rather, oil could be most forcefully felt in energetics and the mining and basic materials sectors. During the decades of the 60's and 70's, industry basically used the significant portion, approximately 60%, of the capitalist export opportunities for the importation of materials rather than for that of technology. The greater proportion of industrial installations built during that era was accomplished on this import basis. The effect of the delay and postponement of the measures following the oil price increase still influences the results today.

Due to its structure and its energy and raw materials needs, the technological basis established during the decades of the 60's and 70's confronted the economic optimum of the 80's. Presently, we are operating the 20-40 year-old coal burning power plants which use 3500-4000 kcal/kw-hr at the greatest possible capacity as basic power plants, and only operate the modern hydrocarbon power plants built between 1970 and 1978 as peak power plants. The same situation exists with other modern technologies, e.g., our new cement factories, sugar factories, etc.

Based on their user value, hydrocarbons may be utilized with the greatest efficiency as a basic material in the chemical industry, as a motor fuel source in transportation and agriculture, as well as a heat source in the public sector. In the power plants, only that proportion is allowed to be burned which is unavoidable from the technological point of view.

To date, within the framework of the governmental energy management programs,

the yield of refined products from crude oil rose to 58%. With the introduction of the presently realized catalytic cracking plant and further phases--e.g., viscosity reduction and alkylation--we too will reach a 75% yield of refined products. With this we will still be far from the 85% level which is desirable from both economic and technological perspectives.

Within the framework of a comprehensive energy policy strategy, energetics is using a declining amount of oil derivatives which will be replaced by coal and atomic energy in the electric industry, and by domestic natural gas and coal in industry, agriculture and in the residential communal sphere. For example, the implementation of one block of atomic energy plants eliminated the use of 700,000 tons of hydrocarbons.

We are developing petrochemistry in harmony with the more intense refinement of crude oil and natural gas. As a result, the production of structural materials --polypropylene and unbranched low-density polyethylene--is expanding and the manufacturing capacity of artificial fertilizers is stabilizing; the modernization of chemical fiber manufacturing is also possible in conjunction with light industry.

Generally, within the framework of energetics, we must develop every such activity, construction, technology, machine, etc., by the use of which the energy and raw materials needs of production and consumption are reduced. The production organization changes directed toward the reduction of energy and raw materials needs must be accompanied not only by the reduction of manufacturing costs and import austerity but also, since the machines and technologies with reduced energy needs are most likely to satisfy foreign demand, by attention to fundamental conditions for improving marketability.

The block of construction and basic materials determines the development of the processing industry; at the same time, the mining industry is unable to realize successful technical development if it does not receive the appropriate products and installations from the processing industry.

Hungarian iron metallurgy is a neuralgic area from the viewpoint of industrial development. Surveying the technological structure of the vertical combination, we must primarily point out the poor quality of the iron ore, as a result of which for every ton of pig iron, 2.1 tons of added material and nearly 700 kg of coke are required. These are unfavorable numbers. Steel manufacturing has been modernized somewhat, but even with the consideration of converter technology, electric steel-making processes and ladle metallurgy, the proportion of Siemens-Martin technology which already plays a far lesser role in countries having a modern steel industry is greater than 40%.

The levels of the other technological sections of the vertical combination have an extremely negative effect on the efficiency of the machine industry. Of the 19 mill trains, the levels of only three could be called satisfactory by international standards; 7 are acceptable and 9 are more than 50 years old and totally antiquated. We did not allocate a satisfactory amount of financial resources towards the preparation of primary products and the improvement of

quality nor to the expansion of secondary and tertiary products; thus, the quality of our products is middling at best. As a result, specific steel use is higher, and secondly, the increasingly stringent requirements of the machine industry are more difficult to satisfy. The product composition of our exports is unfavorable, consequently our foundries must export 4.2 tons of steel to counterbalance the importation of 1 ton of quality steel.

Our aluminum industry is developing successfully based on comparative advantages. Recently we have been developing the higher technological phases; thus, above all else, we increased the proportion of aluminum and alloyed aluminum products and semi-finished goods.

An appropriate metallurgical background is indispensable for the competitive position of the processing branches, i.e., the further development of both iron smelting and non-ferrous metallurgy. Generally, those developments targeting preparatory and basic materials manufacturing must be placed in the foreground which are based on domestic raw materials, whose products could be marketed en masse under favorable conditions and when the advantages of the international division of labor--including the socialist integration--are utilizable.

Our pharmaceutical industry is the sector which is internationally competitive; however, the technology here too is extremely polarized. The standards of the basic technological phases--synthesis, fermentation, extraction--are backward by international standards. The finishing and packaging phases must be developed because these are indispensable for international competitiveness. At the same time, a very important issue in this innovative sector is what proportion should be allocated towards technical development. The domestic pharmaceutical industry allocates 4% of its income to this end. This is four times the domestic industrial average, but half to one-third of the allocations of the large competitors (Ciba-Geigy, 8%; Wellcome [sic], 10%; Laross [sic], 12%; Sandoz, 13%). An important task of the chemical industry is to strengthen relations with agriculture and accordingly, to develop the manufacturing of artificial fertilizers and plant protectives, because together with agricultural and food industry machine manufacturing, this is an important background industry of our agrarian culture.

A quickly developing area in the chemical industry is the production of fine chemicals and cosmetics.

As a result of the developmental results of our rubber industry, we are significant exporters in a few areas even by world standards (e.g., hoses for deep drilling, multibranched hydraulic hosing); in addition, it satisfies the requirements of the domestic auto industry and agriculture with modern products (steel-belted radial tires).

Nor is the technological chain of light industry of homogenous strength. Above all else, we must make significant advances in the sources of basic materials--the spinning, yarn preparation and finishing phases. Without this we are unable to take advantage of the fact that more than 50% of the textile industry is automated and that more than 30% of the machines are technologically up-to-

date and can assure the manufacture of products of suitable quality. The ready-to-wear clothing industry is satisfying the domestic demands on an ever higher level; at the same time its export role is expanding. The direction of development is similar in the leather and shoe industries. The paper and printing industries also possess a greater proportion of modern technologies and products.

The machine industry belongs among the dynamically expanding sectors of industry. The competitiveness of a few areas, above all the digital machine tool industry, auto industry and the energetic machine manufacturing industry are on an international level. For example, the planners of the public transport vehicle program correctly recognized that the development of the economy requires, not only in the socialist countries but also in the developed countries, ever greater numbers of buses and specialized heavy-duty commercial vehicles. One of the most important areas of the machine industry is electronics. For example, in a modern machine tool, the old classical machine industry ratio has shrunk to below 50% and the decisive ratio, determining competitiveness, is represented by electronics. We started to develop the domestic electronics industry with a lag of approximately 1 1/2 decades. Perhaps this may also account for the fact that in the Common Market countries, the production value per capita in the electronics industry is nearly 66 thousand dollars while in the domestic electronics industry the same is approximately 470 thousand forints per capita. Consequently, it is extremely important that we be able to make genuine advances as soon as possible by intensive technical development and the creation of sectors such as mechatronics, which makes possible the actual interconnection of the machine industry and electronics.

A component of suitable foresight is the recognition of the consecutive step of development. That we did not realize the urgency of the development of the domestic electronics industry, primarily that of microelectronics, has resulted in long-lasting disadvantages; the decision directed toward development was made only in 1981 amidst unfavorable foreign economic circumstances. Our electronics industry will feel the effects of the postponement of the decision until at least the first half of the 1980's.

Our industrial development goals based on domestic attributes and on the opportunities of the international division of labor essentially determines the scope in which industry's mid- and long-term plans must be formulated on the principles of selective development and in the knowledge of resource opportunities.

In industry, there are great differences among production and product structures and technological levels; there are areas that are significantly higher than the average level and there are those that are significantly below it. In our present situation it is not possible to formulate a comprehensive program which would merely be able to even out these differences to the average standard.

Therefore, further efforts must be made with an eye toward systematizing development, to connect the technological islands running along connected threads so that a competitive product is produced with modern production and the appropriate technological background. In the future, these connected

threads must become the tractive force of industrial development. With regard to resource areas, these threads will originate from the basic materials energy block, but by virtue of the nature of the development, they will primarily condense in the processing industry block--and within this, using the broadest sense of the term, primarily in the machine industry (along with electronics!).

It could be stated as the general principle of industrial development that technical development and the capacity for adjusting to changes is the most important tractive force of every sector of industrial production. To a large extent, the success of our economic policy depends on whether we will be able to suitably mobilize our intellectual and technical capabilities in the face of the social and economic challenges of the next two decades confronting us.

For example, the competitiveness of products requires a far more modern technological level than available to date. The automation of industry, the electronification of production and the partial development of robotics must all contribute to this. The mechanization of intellectual work and work organization, the acceleration of information processing and circulation, the introduction of microelectronics into economic and social processes, and the production of work-, material- and energy-requiring products using microelectronic solutions present numerous development opportunities for our industry, concurrent with the expected trend of demand. Because of our domestic capacities, chief among our industrial development goals is the development of every metallurgical, machine-, chemical- and light industrial activity which promotes a modern agricultural and food economy: quality steel manufacturing, agricultural and food industry machine manufacturing, the manufacturing of artificial fertilizers and plant protectives and agricultural and food industry machine manufacturing-biotechnological systems.

Our existing research base, our production traditions and the trend of foreign demand all favor further systemwide development. For example, in the area of health care, the close cooperation of the machine-, building-, assembly- and pharmaceutical industries is required, including education and training in intellectual export. A few further examples are: flexible manufacturing system of electronically integrated machine tool manufacturing, international plant protective-agrochemical cooperation, aluminum semi-finished goods-plastics industry-cable manufacturing, telephone subassembly manufacturing-auto industry cooperation.

The further development of macroeconomic management is indispensable for the realization of these endeavors. In addition to central development decisions, the realization of the industrial policy aims also depends on the latitude as well as the motivation of the enterprises. We hope for greater latitude and motivation primarily from changes in the wage- and price-regulatory system. In the mining and basic materials sectors the pursuit of major market prices creates realistic ratios. It is hoped that in the competitive sphere, a favorable competitive price system for industry will be in effect as soon as possible and to the widest extent with the gradual dissolution of the price restrictions. At the same time we must strengthen competition, above all by enhancing domestic supply but also by strengthening import competition.

At the same time, the assertion of the competitive price is also a significant

qualitative demand; longer delivery times or greater technological tolerance limitations may be stipulated only if the sellers couple this with suitable price reductions. Only when the prices and accomplishments will be in harmony in all vertical combinations of the economy will a price increase be an indicator of higher value. The implementation of selective industrial development should result in a strong supply-side market, and thus a true competitive situation must evolve.

The further development of wage regulations will force the enterprises to have more flexible and rational manpower management and will promote the strengthening of the harmony between wages and output. In harmony with more expensive human labor--although in the short run, this will certainly cause many problems--we would like to develop a comprehensive program primarily in the machine industry, reaping the benefits of the results of technical development (mechatronics) which will accelerate the replacement of human labor with machines and automation. More efficient manpower management is also aided if the industrial activities are more rationally distributed among the various organizations. Today the large enterprises are performing activities which could be performed more economically by not only the smaller enterprises, organizations and cooperatives but even by private small industry. Thus, cooperation with these must be expanded by relying more heavily on industrial activity of agriculture and even on private small industry.

We will promote the maintenance, and in certain places, the expansion of multi-shifts and the maintenance of continuous production by further tax incentives, because great damage is caused by the fact that in many enterprises, even valuable machines are operated at low capacity, at only a small fraction of their theoretical capacity.

In general, it is important for industry to employ primary contractors to an even greater extent; it should allow systemwide development and partial activities of less consequence to pass on to more flexible areas.

It is hoped that as a result of the effects of the changes in income regulations, centralization may be lessened. Collectively, these changes could also promote more rational cost management. The relations between the state and the enterprises must become more reliable. Strategic planning could only be expected from the enterprises if we determine long-term economic parameters. For example, in 1980 we deducted 10% from the reserve fund, 15% in 1980-81, and 20% in 1981; the deduction from the development fund was 6% in 1982, 9% in 1983 and 22% in 1984. At the same time, in budgetary contributions, industry's assets rose from 90 billion to 120 billion.

While modernizing macroeconomic management, the state must assume a larger share of the risks of the enterprises' international endeavors; however, for this it is also necessary to have a far more effective insurance policy than presently available. First of all, we would like to diffuse the confrontation currently observable among domestic needs, socialist exports and capitalist exports by a product surplus. In the most important areas we must achieve a surplus capacity so that the demands of all three could be satisfied. It is necessary to expand import opportunities more moderately than the export

surpluses but still in proportion with them; however at this point, the complete realization of socialist import possibilities is very important for industry while being a task of social and technical content.

The intensification of CEMA integration and the strengthening of our foreign trade relations with socialist countries continues to be fundamental for us. We must take the changing demands into greater consideration, and we wish to develop our production structure and the quality of our products so that the cooperation between our enterprises and the socialist enterprises of the CEMA countries may evolve far better than at present.

The changing of the enterprise management system could promote the acknowledgment through the whole of industry that the management of state property is a societal matter, and that the worker collectives must participate in this in an every increasing way. In conjunction with this, collective wisdom and entrepreneur-type management must be strengthened.

According to the conceptions of the Industrial Ministry, the energy block, metallurgy and the armaments industry will operate under a state-administered forum; this represents 10% of the enterprises, and 30% of the work force. Generally, enterprises with less than 500 employees belong under the jurisdiction of its elected directorate. With mid- and large-sized enterprises, the practical form is management by the enterprise council; thus, this will come into general, or rather, typical use in industry.

While the enterprises' independence increases, the scope of movement increases within it. In order to be able to survey this scope of movement, a modern information technology must be developed at a very fast pace. Strictly speaking, in this interrelationship each enterprise could be conceived of as a component of a subdivided intelligence system, each as a small microprocessor, whose margin of movement is circumscribed by the regulatory system. However, this margin of movement also contributes to the whole in a hierarchical system and forms a mosaic. But no matter how complex or complicated the scope of activity of either the national economy as a whole or that of a sector of the economy is, utilization of strategic decision-making is made possible by modern information technology and this could help in the constant development of the never-ending industrial policy and in its renewal.

9956

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ECONOMISTS SOCIETY CRITIQUES 1985 PLAN

Warsaw ZYCIE GOSPODARCZE in Polish No 42, 14 Oct 84 p 11

[Article by Marek Misiak: "PTE's Appraisal of Preliminary Lines of 1985 Plan"]

[Excerpts] A week ago, President of the Polish Economic Society (PTE), Professor Tomasz Afeltowicz, submitted to ZYCIE GOSPODARCZE the organization's appraisal of the Preliminary Lines of the Central Annual Plan for 1985 for presentation in the magazine. In many respects, this appraisal corresponds to the opinions of the Consultative Economic Council and to articles by various authors published in ZYCIE GOSPODARCZE in recent weeks. Nevertheless, we hope that the readers will find it interesting to study the PTE appraisal, especially as it "reflects the broad discussion among PTE members," to quote from an introductory passage.

At the outset, the PTE observed that genuine social consultations would call for a longer period of time, "necessary for the exchange of views and arriving at a uniform opinion, etc." Certainly, the 1 month deadline--and a holiday month at that--did not help in the discussion and exchange of views on the preliminary draft of the CAP and it would be difficult to challenge this assertion. However, a 1-year plan cannot be discussed for too long. The PTE should soon enjoy greater possibilities of an exchange of views when it comes to the discussion over the conception of the plan for 1986-1990. Besides, the demand to be given the time necessary for arriving at a uniform position is probably difficult to implement at all. Probably a better idea would be for the PTE to present in its appraisal not only uniform but also divergent opinions.

In the future, the planners could be expected to come up with fuller variant approaches while the discussions among economists over the draft plan should produce broad arguments in favor of or against individual variants with possible explanation which variant received more support among the PTE authorities or other agencies of the association.

According to the PTE, the principal shortcoming of the preliminary draft are the gaps in the information supplied. As a result, the draft does not

help enterprises to adjust their own plans for 1985. The main shortcomings--according to the PTE--were the following:

--The lack of a deepened forecast of the implementation of the plan for 1984;

--The weak relationship between the content of the draft and the results of the economic reform, and in particular the lack of an estimate of the influence of the reform on the projected implementation of the plan;

--The shortage of planning and financial information, which points to a continued traditional domination and supremacy of planning in terms of definite projects or products over planning in terms of finance (according to the PTE, this substantially weakens the informative value of the preliminary draft from the point of view of enterprises).

While it is true that the enterprises could get an idea about the still rather broad scope of government orders and operational programs from the annexes, which was useful information for them, it was at the same time a proof of the still very broad scope of interference on the part of the central authorities. On the other hand, the draft itself and the annexes did not supply many other and very useful data, e.g., projections concerning the likely movement of prices on the world and the domestic market, an appraisal of the shortages of production supplies or the situation in the labor market in individual industries or regions.

Economists were also upset by the way the draft discussed the possibilities of increasing production in individual branches, without taking into consideration the factors that make up the averages in individual branches and without proposing rival variants. For this reason, the PTE appraisal quoted the view--presumably coming from PTE branches in enterprises--that such a plan provides enterprises with an opportunity to prepare their draft plans at average levels rather than the truly feasible ones.

It is possible to suspect that enterprises may tend to plan in a traditional way, referring to figures schematically given in the central plan. However, in order to prevent this the preliminary draft should explain at length what the new role of enterprises in planning should consist in. It would also be necessary to make step forward in informing enterprises about the external conditions. This is also confirmed by the replies of enterprise managers to a questionnaire of the ZARZADZANIE monthly about their reaction to the publication of statistical figures about the financial performance and average pay in the 500 biggest enterprises of the manufacturing industry.

According to the PTE, the work of enterprises on their plans for 1985 will be affected by the "notorious use of the means of implementing the plan that are unacceptable or questionable from the point of view of the conception of changes in the planning system." In this connection, the PTE document suggests:

--The preparation, in the second quarter of 1985, of the codification of the fundamental legal designs regarding the implementation of economic plans, based on the law on planning;

--The lifting or limitation of the validity--or modification--of a part of the Council of Ministers executive orders whose contents follows from provisional conditions;

--The adjustment of the methods of preparation of the National Socioeconomic Plan for the years 1986-1990 (and the methods of making annual plans) to the amended legislation governing planning activity.

Attention has also been drawn to the necessity of a parallel modification of economic instruments. The suggestions in this respect are similar to the opinions of the Consultative Economic Council.

The PTE appraisal suggests that the projected growth of the national income by 3.2 percent and industrial production by 4.2 percent, and especially the production of consumer goods and services does not reflect the actual possibilities and needs of the economy. "Many economists fear that the projected growth of the national income by 3.2 percent reflects an overcautious attitude to the economic tendencies likely to appear next year and does not correspond to the information obtained in direct contacts with enterprises."

At the same time, it is emphasized in the PTE document that in recent years, similarly as in the preceding period, production growth was attained in too big a degree as a result of the use of simple reserves and that it continued to be extensive growth. "According to many economists, it is necessary to take a critical look at the economies program and to develop more efficient solutions. It is also suggested that a complex program of economies be adopted."

There are serious reservations regarding the program of improving the market situation. While accepting the general conception, the PTE declares that "the existing market situation does not encourage a growth of market and production activity of economic organizations, an efficient operation of economic reform instruments or the growth of the competitiveness of Polish products abroad."

The instruments of influencing supply envisaged by the draft consist first of all in the maintenance of the to-date practice of applying instruments of a command-and-quota nature to this end. On the other hand, some economists are of the opinion that the moves involving prices are treated "in too general a manner" in the draft.

Of the proposed variants of the shaping of real incomes of the population, the PTE chose variant I [zero-growth of real incomes but improved market equilibrium] but at the same time voiced doubts about its feasibility.

"Is it possibly assumed that despite the introduction of motivational pay systems in enterprises, combined with the envisaged lowering of the degree of rewarding the growth of productivity, only a relatively small growth of this productivity will take place?"

The freezing of real incomes at the level defined in the preliminary draft in the name of combating inflation is regarded by the PTE as rather unrealistic; besides, it is pointed out that this neutralizes the motivational role of wages and limits the possibility of rectifying the serious wage disparities and especially the raising of wages in the nonmaterial sector. Similarly as in the case of the price movement, this does not take into account the autonomous movement of wages given the presently binding principles, e.g., the growth of wages as many pay components are incorporated in the basic rate.

The PTE also voiced considerable anxiety over the problem of investments. The theoretically correct limitation of the growth of investments, the PTE argues, must not be generalized nor even--according to some economists--should define the global volume of investments. It should not apply to projects in which the amount of building work involved is low (which is typical of investments financed by enterprises), projects with short gestation period and some projects on which the use of production capacities in the existing plants may depend. It is necessary to abandon the classification of outlays employed so far. Cuts in investment programs should be more accurately aimed, namely, at socially unjustified and low-efficiency projects, and they should land on target, especially as regards the unfinished projects started in the 1970's.

The PTE appraisal also refers to many other problems. Next to the proposal for increasing the role of economic and financial instruments in planning, it also lists many reservations as regards the presently binding instruments: "the fiscal policy instruments are too one-sidedly directed toward budget equilibrium, whereas they do not take fully into account the stimulation of export-oriented production or technological progress. Similar critical views were voiced with regard to the application of subsidies and tax concessions. The excessive number of partial moves in this respect does not produce the expected results."

The PTE also quoted the opinion frequently voiced by its members, who urge curbs on a further growth of employment in the nonproductive branches (except health care and education), notably industrial administration, supply institutions and trade.

As for foreign trade, the appraisal stressed the need of a permanent updating of the currency exchange rates so as to make it possible to stimulate exports in a more decisive way.

In the closing paragraph of the document, the PTE "declares its readiness to help prepare planning solutions oriented toward the problems of the socioeconomic development strategy."

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RESOURCES CONSERVATION REPORT ON CENTRALIZED CONTROLS

Warsaw ZYCIE GOSPODARCZE in Polish No 42, 14 Oct 84 pp 1, 4

[Article by Tomasz Jezioranski: "The Resources Conservation Program After a Year"]

[Text] The Sejm has been presented with a government report on the first year of implementing the resources conservation, one of two appendices of this kind to the 3-year plan [for 1983-1985]. This is an extensive document, approaching 130 pages, and the deputies--whose job is to analyze and assess it--will hardly be envied by anybody.

If one wants to learn what progress has been made in the resources conservation field one has to wade through the multitude of data reflecting various computational methods and various degrees of generalization. And drawing practical conclusions will hardly be helped by the fact that the report is discussed nearly a year after the period it covers.

6 Equals 12 (or More)

However, as the authors point out, it is at best a half-year period (the second half of 1983) and not a whole year that can be considered (after the adoption of the program in April 1983, several months passed before it was disaggregated). This reservation is made not without reason, and it assumes astonishing meaning when seen in the context of basic economic-efficiency indicators.

There are 10 such indicators listed in the report. Following is how they compared last year with average annual targets set in the program:

--Labor productivity, measured by the value of national income produced per employee: actual increase of 5.9 percent against the 3.3-4 percent target (overfulfillment by 47 to 78 percent);

--Industrial productivity, measured by the value of sold production per employee: actual increase of 7.8 percent against the plan target of 5.9 to 6.6 percent (overfulfillment by 18-32 percent);

--Construction-sector productivity, measured by the value of base production per employee: actual increase of 6.4 percent against the plan target of 6.7 percent (underfulfillment by 4.5 percent);

--Material resources' content in national income: actual drop by 2.2 percent against the plan target of 1.4-1.6 percent drop (overfulfillment by 47-57 percent);

--Material resources' content in industrial production: actual drop by 2.6 percent against the plan target of 1.9-2.1 percent (overfulfillment by 24-37 percent);

--Material content in construction: actual increase by 5.4 percent against the planned decline by 2 percent;

--Energy content in national income: actual drop by 6.2 percent against the planned 1.2-1.6 percent decline (nearly five-fold overfulfillment, meaning that targets were met for the whole 3-year period and for the next 2 years);

--Energy content in industrial production: actual drop by 1.6 percent against the planned target of 2.4-2.9 percent (underfulfillment by 33-45 percent);

--Coal consumption in transport: actual drop by 5.4 percent against the planned target of 2.9 percent (with only 0.6 percentage point left for attainment of the 3-year target);

--Energy consumption in transport: actual drop by 1.3 percent against the plan target of 1.4 percent (underfulfillment by 7 percent).

Statistically, plan targets were not met in four cases (and in two cases only insignificantly), while in the remaining six the reality turned out better than planned (much better in two cases). Add to this the fact that half of the failures are the liability of just one sector (construction), and you will be tempted--just as the authors of the report--to make a very positive appraisal of the first year of program implementation. However, the above presented juxtaposition gives rise to some doubts, not all of which are fully and directly dispelled in next chapters of the report.

Measurements

The first doubt has to do with the spectacular success in greatly reducing the energy content in national income (compared to plan targets). How was it possible to score such result in a situation where industry, which generates nearly half of national income and which consumes most of energy used by the national economy (including more than a half of the country's electricity consumption), failed to meet the plan target for energy-content reduction by more than one-third?

Another doubt, often raised on such occasions, concerns the measurements employed in calculations. As easily noticed, the above presented list draws

on value-based indicators relating material costs to effects, that is either national income or production. This is a precious yet auxiliary measurement--even when constant prices are employed (as is the case in the report). It is not capable of revealing structural changes or changes in the complexity of production.

The reduction of so-calculated material content cannot be treated *ex definitione* as a positive development reflecting judicious economies. It may happen that the reduction comes as a result of undesirable material substitution (pushing up costs for users at higher stages of processing), or that it reflects industry's abandonment of complex products, requiring extended co-production ties, in favor of simple, more primitive items, made by the final producers themselves. It would be hard to prove that such process were not absent from the Polish economy in 1983.

I do not want to say that the authors of the report remain unaware of the faults of value-based yardsticks, but as I see it, they want us not to attach great importance to these faults. They provided one of the obstacles the Sejm deputies had to surmount. Prominence given to value-based yardsticks overshadows other, very interesting pieces of information which put in question the value-measured successes. A good case in point is provided by the modest results--as described by the authors themselves--in reducing the metal content, or the crucial segment of raw materials management (quantitative measurements).

The consumption of copper for the production of 1 ton of rolled copper products dropped in 1983 by just 0.4 percent from 1982, and its level (1,020 kg) was still 1 percent higher than the figure for 1980-1981. The consumption of metallic charge per ton of crude steel produced at open hearth furnaces in 1983 was higher than a year earlier by 4 kg (over 0.3 percent). The consumption of aluminum for the production of a ton of metallurgical alloys dropped by 0.4 percent (down to 958 kg), but it should not be forgotten that in 1980-1981 it ran at 922-923 kg. And the consumption of tin for 1 ton of tin/lead binder dropped by 0.9 percent to reach the best level since 1970.

So while the report, quoting GUS [Central Statistical Office] data, says that improvement in unit consumption of basic raw and intermediate materials was recorded in 16 out of the 27 cases studied in socialized industry, one should be aware of the relativity of this improvement. It would be worthwhile to view the optimistic value-based data also through this prism.

In its analytical part, the report carries a very interesting presentation of the consumption of 11 basic raw and intermediate materials in individual branches of socialized industry in terms of kg per Zl 1 million worth of sold production at 1983 producer prices (mixed quantitative and value-based measurement).

These data show that in socialized industry as a whole, the consumption of rolled products and aluminum dropped, the consumption of coniferous timber stayed at the 1982 level, and there was an increase in the consumption of

copper, zinc, tin, lead, plastics, natural and synthetic rubber, and cement--ranging from 2.9 percent (synthetic rubber) to 33.3 percent growth (tin).

There is no place to quote the whole table here, but mention should be made of two aspects that strike one upon analyzing it in sectoral breakdown. First this is the substantial increase in material resources content in the coal industry (including a nearly 27 percent growth in rolled products--the highest in the four branches where the consumption of these products rose) and its enormous increase in the iron/steel industry (two times for zinc and lead and more than 10 times for aluminum). Second, the random nature of the scored results leaves no doubts as to their meaning for efficiency.

Unasked Question

The latter aspect is illustrated by two, rather contradictory, upward trends in the consumption of metals and, simultaneously, of plastics. A suspicion springs to mind--reflected in the report with excessive caution, it seems--that the obtained performance is not so much a result of conscious material substitution as an outcome of product-mix maneuvers, or changes in the structure of production forced by short-time supply and pricing determinants. Which, incidentally, only strengthens one's reservation toward the value figures presented at the beginning.

Let's now turn our attention to that part of the report which deals with the quality of industrial products. The presented data show that the share of quality mark-awarded production in total sold production subject to quality assessment dropped in 1983 by 9.2 percent. The steepest decline was recorded in the following industries: construction materials (down to nil), fine ceramics (drop by nearly 48 percent), precision engineering (by 40 percent), and glassware (by more than 38 percent).

Progress was achieved primarily in textiles (increase by 24 percent) and leather (by more than 21 percent). Behind these two leaders, the quality improvement in other branches ranged between 0.8 percent (metals) and 3.7 percent (paper). To complete the picture, let it be added that the smallest regression was recorded in the electric/electronics industry (down by 6.9 percent). The pattern of improvement and regression is thus outrightly unfavorable.

Pausing for a while with the presentation of what the report contains, let us turn to what is absent from it. One such thing is an aggregate assessment based on such hardly original, rather obvious associations.

One may take heart, for example, from the fact that the branch "means of transport" cut the consumption of rolled products by 12 percent and zinc by 10 percent, while increasing the use of plastics by 32 percent, but at the same time one learns that the discussed branch recorded a more than 27 percent regression in quality (here, the report only confirms the findings of those buying new cars and spare parts to them).

Any citizen living a normal life could name examples of other material substitutions resulting in serious lowering of product quality and lifetime. Such experiences are being generalized, arising doubts as to the real effects of the economies campaign.

Regrettably, the report does not view things from this angle which otherwise might give rise to a very interesting and useful analysis. Several well-selected and thoroughly tested examples of this kind would tell much more about the actual implementation of the economies program than is told by general indices, even if served in plenty.

Effects Without Efficiency

Another important problem, next to material resources' content, is that of energy content. Here again, the picture emerging from the document is ambiguous. On the one hand, we have very encouraging data in terms of value (as cited at the beginning of this article), subsequently translated into quantitative data. Let it be recalled that according to these data the consumption of energy in tons of coal equivalent per Zl 1 million worth of national income dropped by 6.2 percent in the national economy as a whole, including a 6.5 percent drop in the socialized sector of the economy and 1.6 percent decline in socialized industry. On the other hand, however--but this will be tackled later.

Leaving aside all reservations, let's take the applied computational methods for granted and try to detect the source of achieved economies. The report states guardedly--and not without reason--that "it transpires from data supplied by individual ministries that the economies were scored as a result of the trimming of fuels and energy management at enterprises--including the favorable substitution of fuels, greater degree of capacity utilization, and the application of previously designed technological-progress ventures."

Drawing on ministerial data, the report adduces examples of major economies-oriented measures in the field of energy management. Here they are:

--Sixteen boilers were introduced with furnaces adjusted to low-calory coal, yielding energy efficiency higher by 2-4 percent than in traditional boilers;

--A design for fluidized-bed boiler for the Jaworzno power station was made, and work was started on its manufacture;

--An economic version "E" of the Polski Fiat 126p mini-compact car was launched at the FSM factory in August 1983; together with the so-called first package of changes introduced at the end of 1982, it yields fuel savings of up to 12 percent (incidentally, the average fuel-consumption figures given by service manuals enclosed to the now-produced E version are some 20 percent higher than those given for Polski Fiat 126p's made in the past, without any new symbolic letters added--author's note);

--A modernized version of the 359M diesel engine for Star-200 truck was launched at the PSC-Starachowice factory in September 1983; possible economies approach 10,000 tons of low-octane gasoline.

What all these measures have in common is that they could not exert major influence on the improvement of energy-content indicators in 1983. Such influence was exerted by such measures as: the burning of 50,000 tons of mud, instead of some 4,000 tons of coal, at the Skawina power station; the burning of some 1,500 tons of old tires, instead of several hundred tons of fuel oil, at the Nowiny II cement plant; the switching of bakery ovens from oil to coal burning at Szczecin's Spolem, etc.

These are the examples presented by the report. They shouldn't be played down. Small steps are also important--not only the great leaps forward. But these results should be seen in the right perspective. As rightly stated in the report, the fuel substitution at enterprises, applied in 1983 on a large scale, had the effect of lowering the efficiency of burning, because better fuels were replaced by worse ones. I am not certain whether the overall effect of such measures for the economy is positive--as the authors of the report seem to believe. Not inconceivably, the final effect may be similar to that of savings on insulation materials in housing construction.

This notwithstanding, it remains a fact that the energy savings scored in 1983 were to some extent occasional. The road to success is one of structural changes, and here tangible effects are inseparably linked to investments.

The economies program provided for the launching of more than 70 investment projects in the field of energy management. Their implementation should contribute, perceptibly to the rationalization of fuel and energy consumption, and consequently to the lowering of energy content in production, reads the document--only to add the following passage: "Regrettably, the implementation of investment projects departed widely from what was originally planned. The investment program was reduced (by whom?--author's note) by 10 percent of products, and some 40 percent of projects are threatened with or greater delays." (The matter is discussed in greater detail in special appendix 4 to the report, of which more later--author's note.)

"It can be stated already now," concludes the report, "that the economies on account of energy-oriented modernization projects, as provided for in the program, will not be obtained, and that they will widely miss the original targets (author's emphasis). This shows that also in the implementation of the economies program, projects were being undertaken without ensuring proper resources for their implementation."

One can readily subscribe to this opinion, only adding that in the past similar retrospective reflections used to accompany all undertakings in the nature of one-shot campaigns. The current case is all the sadder as in the period of reform rationalization should be forced by rules of economic game, rather than attributes typical of one-off actions.

The document submitted to Sejm deputies reads: "On the basis of GUS and GICE [Central Energy Authority] data, it can be concluded that the structural changes in the national economy in 1983 were not tangibly aimed at the reduction of energy content. The energy-intensive structure of the economy continued to consolidate (author's emphasis), and in particular to energy-intensive structure of socialized industry."

This opinion, standing out in the report with its unequivocal character and criticism, is illustrated by data showing that the highest growth-rate of production was reported in 1983 by branches with the highest structural energy content, or the steel and chemical industries. The lowest dynamics was in branches with the least energy content--the light and food-processing industries.

What Next?

When reading the above-quoted criticism of structural undertakings, one should remember that 1983 was the first, and less than full, year of the implementation of the economies program. Nowhere else as in the sphere of investment is the effect so much separated in time from the original idea. So, while seeing last year's results in the right perspective, let us take interest in the already mentioned appendix 4--in order to see what effects can we expect in the immediate future. The appendix is titled: "The State of Implementation of Major Modernization Projects in the Field of Energy Management for 1983-1985."

In the chemical segment of the program, 19 projects were planned, of which 4 were implemented (at Blachownia, Police, Kedzierzyn, and Tarnow), 5 were scrapped, and 3 are not threatened with delays. The remaining seven projects are affected by failure to attract builders, shortage of funds, or the spending of all earmarked money (at NPZO Rokita, where the final effect equalled 16 percent of the planned figure).

Of the 14 projects in metallurgy, 6 stand no chance of bearing fruit by 1985 (abandonment, failure to break ground), 4 have already been completed, and the remaining 6 are threatened with delays. The only project planned in the engineering industry ("recovery of exhaust heat from the tank furnaces" at Piaseczno's Polkolor factory of color TV sets) has yet to enter the stage of documentation.

In the sector "power stations and mines," 10 projects were planned at the former. Half of them were implemented, while the remaining ones are threatened--to a lower degree (Adamow power station where "shipments of parts and equipment are insufficiently contracted") or greater (Patnow power plant with "zero advance in work"). Interestingly, the appendix lists no venture aimed at more rational energy consumption at mines.

Out of six projects planned in the wood industry, only one has been unquestionably completed (at the ZPW chipboard factory at Grajewo). Mention should be made here of the project planned at the ZPW chipboard plant at Karlino, consisting in the use of exhaust natural gas for the purpose of

boiler burning. A Zl 30 billion worth installation was built, but "the implementation of the project (read the economies--author's note) depends on gas shipments which were suspended on account of lower pressure in the gasfield."

Next comes the construction materials industry. It planned eight projects, of which two were completed on time. The third one was advanced in 99 percent, yielding just half of the planned effects (at the Olsztyn-based OPCB construction ceramics firm). The remaining projects are in danger.

In the sector of municipal economy, two projects were completed, out of the planned six. In the food processing complex, where four projects were originally planned, the first one was jettisoned, the second one was not started for lack of funds, and in the third one "there is a builder but reinforced steel is lacking, and work advance stands at 1 percent." In the glass industry, three projects out of six were implemented, and two are threatened. And out of the four projects planned in the light industry, one was crossed out, another one was not started, and one was advanced in 20 percent.

In all, 28 out of the 78 planned projects (or 36 percent) were completed, and the remaining ones were either postponed or shelved. Citing inspection findings, the report lists four factors behind this hardly optimistic state of affairs: lack of funds, belated completion of technical blueprints, problems with attracting builders, and shortage of materials and equipment.

In short, nothing new--even though, under the reform, the situation is now supposed to be different.

Glorification of Direct Tools

The last chapter of the report is devoted to the assessment of the applied instruments. It cannot be said that individual elements of the economic/financial system met with unequivocal approval of the authors. Since this part of the report is particularly outdated (the 1983 system is in part a matter of the past), I will confine to quoting some relatively relevant passages:

On prices: "The regulated, contractual, and to some extent official prices continue to be based on efficiency dampening cost-plus formula."

On income-tax relief connected with material resources' management: "The application of product-linked tax concessions is a positive development--although it should be treated as an auxiliary arrangement rather than an independent instrument. The weak point of the concessions is that they are still granted according to inaccurate criteria (element of discretion) and on too many counts--which blurs the system and which may contribute to fueling inflation."

On sales tax: "It is supposed to provide an instrument reinforcing restructuring measures in the national economy, but because of the absence in 1983 of a clear-cut economic restructuring program, this role could not be played."

On wage principles: "Generally, the 1983 changes in the wage system and in the criteria of FAZ taxation were favorable and targeted at the stimulation of efficiency."

On financial stimuli at enterprises: "Enterprises had sufficient room for motivational arrangements aimed at material savings..., but it is worrying that--as shown by studies of the Material Resources Office (UGM) and the Material Resources Institute (IGM)--37 percent of enterprises under review made no such arrangements."

This fragmentary analysis serves the conclusion that the mechanisms of reform, together with developmental determinants of the economy, were more at work in hampering efficiency progress than in encouraging enterprises to rational management. It is not insignificant which determinants the authors of the reform had in mind. These are: "durably unbalanced market, universal monopoly of the producer, highly material- and energy-intensive structure of industry, and balance-of-payments troubles resulting in drastic cuts on imports and investments."

And following is the final conclusion of the analytical part of the report:

"In a situation where economic mechanisms operate in a limited manner, the importance of direct instruments increases substantially. At the present moment, it is still too early to talk about concrete effects of the functioning of the latter, but there is every indication that they make major contribution toward eliminating the most glaring examples of irrational management. At the same time, they should help develop economies-oriented habits and attitudes."

Such approach can hardly be accepted. It is not in the new factor, or economic instruments, where the authors of the report see hopes for the development of savings-oriented habits and attitudes but in the old-time direct tools, which are well and thoroughly tested as ineffective--although always promising (in another passage in the report, its authors assure us that administrative measures, while failing to bring about tangible effects in 1983, "should well guarantee tangible effects in 1984").

In the light of this, it is not surprising that the part of the report devoted to economic instruments--highly critical in details--is very weak when it comes to conclusions. There is general talk about modifications, but only one concrete proposal (to abandon gross-type measurements).

But more important, the "instrumental chapter" of the report lacks an assessment of the system as a whole, composed of interconnected and mutually influencing parts. It lacks a reflection on the causes of the identified weaknesses. It lacks a clear-cut distinction between the conceptual aspect and application aspect of the currently functioning arrangements. And what is most important, such an approach results in a dearth of conclusions on the improvement of economic instruments in order to make them more effective in the drive toward economies.

In other words, the report on the initial period of the implementation of resources conservation program fails to provide a satisfactory answer to the question which in the period of reforming the economy assumes the greatest importance: what and how should be done in order to so improve the system that efficiency will not be "guaranteed" by administrative measures, and will become a basic and natural criterion of economic activity at any level?

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SEEKING WAYS TO AVOID ALL-OUT WAGE, PRICE FREEZE

Warsaw ZYCIE GOSPODARCZE in Polish No 39, 23 Sep 84 p 3

[Article by Zbigniew R. Wierzbicki: "Countering Inflationary Threat"]

[Text] Economic performance in 1983 and trends revealed in the first half of 1984 testify to a strong inflationary threat to Poland's economic reform and to its socioeconomic development.

An inflationary threat to the Polish economy consists basically in: inadequate production growth rate (coupled with soaring production costs) in industries turning out goods for exports and for the domestic market; many industries' failure to reach past years' production levels; sluggish productivity; high wage growth rate; and prices showing an alarmingly upward trend. All this is occurring against the background of an aggressive, excessive and inefficient investment expansion.

High inflation rate is likely to continue in 1984. Consequently, a need for an all-out price and wage freeze in response to public demands must not be discounted, even though partial price freeze has already been in effect for some time. Yet, such a measure would be equal to an ultimate admission that the counter-crisis program has failed, that the economic reform had best be postponed or scrapped altogether and that launching further strategic economic policies need to be delayed even more.

In these circumstances undisputable priority must be accorded to policies aimed at achieving economic equilibrium and improving balance of payments through increased exports. To this end balancing measures, employed first and foremost with respect to consumer market and balance of payments, must be given absolute preference over economic growth stimulants.

Overcoming inflationary threats to the economic reform and to long-term socioeconomic development strategy until 2000 calls for having certain long- and short-term balancing trends built into the economy. Disequilibrium does not occur by accident, nor is it a passing affliction; it stems from frequent and overlapping inflation-generating changes in developmental strategies and related economic policies, coupled with expansive management systems. In other words, it was inflation-generating options of the economic mechanism, aided by an inflationary impact of pursued social policy

options, that produced inflation-prone economic structure. In these circumstances simple growth mechanisms can offer no escape from disruptive impact of disequilibrium. Stepping up growth dynamics will not eliminate tensions produced by imbalance.

The threat remains that an unsound inflationary economic structure, subjected to a stimulus of inflation-generating economic mechanism, may produce yet another economic growth program which, when implemented, would deepen existing disparities rather than restore desirable economic proportions. Apart from that, economic growth thus attained tends to be fairly short-lived.

In this context it is imperative to perform desirable (i.e., balancing) adjustments in current production structure, current investment program makeup as well as in an approach to strategic problems solving.

Course of Action

The national economy confronts the need to take three following courses of action:

--First, to apply brakes to economic mechanism's inflationary impact, in particular in management area;

--Second, to mollify inflationary pressures which mount due to an excessive--in relation to the economy's current potential--consumer demand growth as well as to the currently prevailing social policy concept;

--Third, to absorb an inflationary overhang produced jointly by companies' excessive liquidity and an inflated central investment program.

These three courses of action ought to make possible three parallel (although designed for different time-spans) economic maneuvers:

--First, on supply level (both consumer- and export-oriented), taking into account production potential's present structure. (This operation calls for mounting two programs over 1985-1986; an economy balancing program and a potential conversion program.)

--Second, tackling future economic structure. Involved in this maneuver would be: major investment program modifications as well as outline for the national economy structural changes over 1985-1986.

--Third, an import-export maneuver carried out with a view to improving Polish exports' competitive position as well as to arriving at a rational foreign debt refinancing scheme (a foreign trade and foreign cooperation development plan for 1985-1986).

It is essential that in seeking these economic goals all bodies controlling the country's economic life, from the Council of Ministers' Planning Commission, through sectoral ministries, up to the Ministry of Finance and the

banking system (including the National Bank of Poland), as well as agencies responsible for controlling socioeconomic policy (with the Ministry of Labor, Pay and Social Security) should consistently pursue a "tight money," self-financing policy. Disequilibrium barriers cannot be raised if cheap money is freely accessible. On the other hand a consistently administered policy of tight money and rigorous financing, apart from being logically geared to the economic reform, offers a major chance to influence economic processes through economic methods and instruments.

Investment Program and Investment Policy Recovery

Use has been made in the present survey of some conclusions contained in materials prepared by National Bank of Poland's Experts Group.

Imbalance and inflationary processes have their roots both in legislative and practical sphere; hence expected results can be achieved only through parallel, coordinated action on both these levels.

Neither fiscal nor market disequilibrium can be offset by the economic reform alone. Consistent reform mechanisms need to be aided by corresponding decisions pertaining to the state's socioeconomic policies. Of crucial importance in this respect is the curtailment of inflation-generating investment program, administered through scrapping various investment projects as well as through decreasing production dynamics in capital goods and production supplies industries.

Balancing the economy and curbing inflation rate involve profound reforms in socioeconomic center's performance and structure. In particular it is essential that the present dispersed decisionmaking model be replaced by a single decisionmaking center capable of coordinating measures and activities within the framework of the proposed economic maneuver.

A key task involves maintaining an overall investment's national income share, while relocating significantly resources from "group A" industries, which--very much against recent promises--still enjoy clear priority, to "group B," with a view to obtaining a meaningful increase in consumer market supply and boosting export-oriented activities. Experience accumulated so far indicates that appeals and planning suggestions are notoriously inadequate in this respect. While on price and wage level one could still contemplate consensus-based negotiated settlements, meant to satisfy particular social, occupational and industrial interests at the risk of becoming divorced from reality, on investment level the time has come to stop granting preferential treatment all around, costs notwithstanding. Both the current situation and threats looming ahead require both imagination and willingness to take a risk involved in deep restructuring of the economy through drastic changes in investment policies.

The way to start is with a prompt, in-depth survey of the current investment system and policy drawbacks, with the investment situation assessment and future economic needs forecast to follow, taking into account forthcoming developmental challenges over the period at least until 2000.

Relying on such a survey, we must revise again--effectively this time--the currently implemented investment program so as to concentrate resources on crucial targets. An attempt to contain ever increasing investment commitments involves curtailing all investments--central projects included--which, judging by present progress and outlays, will not be completed by 1986. According to various estimates, the total amount of tied-up capital could be thus reduced by Zl 1,000 billion, i.e., by nearly 35 percent. Such an operation would not be targeted at absolute reduction in investment outlays, but rather at their restructuring, with resources focused on the most desirable industries and projects. Parallel, in order to put an end to a popular practice of "forcing" new investment through so-called "industry-branch oriented programs" (which, as a rule, disrupted the already strained central balances), it would be advisable to institute restrictions on new central investments, effective for at least 3 years (as opposed to spending on machinery).

Parallel, rigorous limitations should be imposed, for the same 3-year period, on new investment financed from companies' own sources, applicable in particular to projects featuring excessive (for example higher than 20-25 percent of overall budget) civil engineering outlays.

To curb extravagant investment drive, so often demonstrated by companies commanding excessive financial resources (the already mentioned investment overhang), a regulation should be passed as soon as possible putting companies under the obligation to accumulate, from their development fund on a special account, full equivalent of the proposed investment cost before the project is commenced. Partial or total waivers would then constitute an investment policy instrument. The present practice, putting emphasis on investor's resources rather than on the project's usefulness to the national economy, may be compatible with the reform's provisions, but is deadly to the economic equilibrium all the same.

In order to absorb the inflationary overhang investment outlays taxation, in the amount of, for instance, 25 percent budget cost with additional 20 percent tax on civil-engineering, should be seriously considered. This scheme, related to the Hungarian experience, might allow for a tax return, partly or in the whole amount, in cases when actual outlays stay within initial budget limits and the project is completed and operating according to schedule.

The list of necessary measures includes also increased interest rate on investment credits (to the order of 15 percent minimum), provided that companies operating within predetermined investment budgets and timetables would be eligible for interest return, up to 40 percent annual interest amount, granted on discretionary basis through a tax release system. This option deserves a particularly careful survey in the context of export-oriented production incentives.

Simultaneously, interest rate of new investment credits must be correlated with interest rates involved in Poland's foreign debt refinancing. Interest rate on domestic credits should be higher than interest rate on new foreign

credits and outstanding debt service by at least 3-4 points, since almost 40 percent of domestic credits are related to foreign transactions.

Next to such changes as revised credit granting procedures, interest rate changes and close investigation of borrowers' creditworthiness it is also necessary to allocate bank credits for purposes rating preferential treatment on contest basis (awarding criteria including, among other features, such factors as project's economic efficiency, construction and repayment period minimizing schemes, maximizing company's own resources share and the like).

Disinvestment and capital depreciation policy need also special attention. Rather than give in to pressures from numerous companies and ministries it is necessary to employ an effective, reasonable policy for controlled disinvestment, envisaging extended takeover of depreciation money by the state budget. Resources thus acquired could be allocated to investment projects undertaken in support of crucial upgrading and restructuring ventures, in particular in export-oriented and market-oriented industries, through a bank credit system based on budget bank deposits rather than on budgetary grants.

While revising investment program one should also seriously consider the need for drastic limitations (including a 3-year freeze period) on outlays meant for projects generating additional demand for raw and intermediate-materials imports, especially from the payments zone II. Moreover, in approving new investment, priority should be given to projects whose production-supplies requirements have been adjusted to rely to the maximum on either domestic resources or those of the CEMA countries. These policies must not, however, encourage an autarky syndrome.

Given the current and future situation in production supplies imports, measures should be taken to concentrate scarce production factors, in particular imported ones, in companies capable of meeting in a most effective way production plans both in terms of aggregate supply and product-mix. (This is particularly true of industries with several firms turning out the same product lines.) Such measures should bring about temporary or permanent withdrawal of the least efficient economic units--and cancellation of many superfluous investment projects. Incidentally, similar additional benefits would accrue if production in many existing plants were intensified through stepping up shift work, since sooner or later we shall have to do away with the absurdly extensive production facilities' utilization system which defies economic thinking. Parallel, shut-downs should be immediately effected, either on temporary or permanent basis, in industries featuring either substantial proportion of idle capacity or overproduction in relation to demand (for instance the cement industry).

These measures, combined with effects coming from consistent employment of creditworthiness criterion by banking and budgetary system (in particular in large urban-industrial agglomerates), reinforced by shut-downs of the most noxious--in environmental terms--plants (primarily those using obsolete technologies), are likely to result in a temporary or permanent withdrawal

of at least several scores nonagricultural enterprises in the state-owned and other sectors. Separate measures should be proposed for agriculture. That would streamline the economy's exorbitant demand for raw and intermediate materials, production supplies and energy, thus opening the door for resources' more effective utilization, with production levels in industries involved maintained or increased. PFAZ funds would serve to redeploy redundant labor. Given the present labor market situation, with many companies trying in vain to recruit additional manpower they need, an unemployment threat seems fairly illusory.

In assessing the measures proposed here one should go by a rule that while the emergency economic situation justifies taking emergency measures, no half-hearted, make-believe attempts at a compromise will answer the case. It is necessary to keep in mind that whereas today some more or less drastic coercive or market mechanisms may arouse controversy in certain circles, several years from now judgment will be based on effects alone.

CSO: 26/00/143

HOUSING CONSTRUCTION STUMBLING BLOCKS ANALYZED

Warsaw ZYCIE GOSPODARCZE in Polish No 39, 23 Sep 84 p 5

[Article by Piotr Dominiak: "300,000 Apartments--Many or Too Few?"]

[Text] The public debate on residential housing construction has apparently become more substantive recently. Presumably, this has been prompted by the specific substance of a document entitled "Housing Policy Implementation and Intentions," elaborated by the Ministry of Administration and Local Economy and the Ministry of Construction and Construction Materials. The extensive (82-page) document has been made available to the institutions and organizations concerned in the first half of the current year. It also provided the groundwork for discussion, which was held first in Sejm committees, the Social and Economic Council and, finally, during a plenary sitting of the Sejm. It is not my job to repeat the many less or more critical judgments passed on this document, which, in its form, appears to be the best of the government housing policy documents to date.

However, its content gives rise to a certain disquieting vision of the future, which was the object of critical comments. Were they justified? Certainly, one must not revert to the practice of drawing up optimistic, albeit unfeasible, programs. But is it a realistic approach to consist in accepting the existing state of affairs?

The concluding assumption of the mentioned document and the respective resolution adopted by the Sejm was that by the year 1990 we would be turning over for use 300,000 apartments a year. So let us ask: the 300,000 apartments, are they too many or too few? Anyone who takes at least some interest in housing issues will answer: Many from the viewpoint of what the economy can do, too few from the viewpoint of the needs. This is the obvious truth, but let us try and size up the gap between the possibilities and the needs. First of all, the 300,000 apartments annually is a higher rate than ever has been achieved in Poland. In the peak year 1978, 284,000 apartments were turned over for use. Considering this, we must realize that arriving at the target will require of the economy a much bigger effort than at that time, all the more difficult as the economy, for the time being, is crippled by deep-running crisis.

What do the possibilities of enlarging apartment building depend on?

Most generally, at the macroeconomic level they are financially determined by the size of the national income, rate of investments and share of housing investments in the total investment spending. Our national income level today is much below what it was at the end of the 1970's. It is beginning to grow slowly, but this is no heady rate and will hardly be in the years immediately ahead. Hence it is most likely that in the year 1990 we will have a national income not much higher than in 1978 (allowing for the difference between the national income distributed and the national income produced). For the past few years the investment rate has been running at less than 20 percent of the national income distributed, which is substantially less than in the preceding decade. Huge pressure from the consumer demand (a typical consumption barrier) rules out any major increase of the share of investments in the national income.

The share of the investment outlays on the so-called housing complex is higher today than in the preceding decade. In response to the recurrent demands put forth in the years 1980-1981, it accounts for about 30 percent of the total investment expenditures. But let us bear in mind that the national income distributed today is smaller than at that time and that the share of investments is also smaller. Moreover, it follows from international comparisons that the share of housing investments in the total investments in Poland in the years 1971-1980 was much smaller than in the great majority of West European countries. In Poland it was 16.8 percent, much below the 28-33 percent of Belgium, Denmark, France, Greece, Spain and West Germany. A certain improvement took place in the years 1981-1982, but the trends to change the level of the national income and the degree of supplying the demand for housing were different then than they are now.

Similar observations come to mind when one analyzes the share of housing investments in the national income. In 1976 the United Nations advised underdeveloped countries to spend a minimum 5 percent of their national income to this end, to be raised to 7 percent after they have reached a higher level of development. Meanwhile, in Poland that share stood at 4 percent in the years 1976-1980 and at 5.6 percent last year. However, one should allow for methods of computing the national income which are different in socialist than in other countries and due to which our data are overstated. Besides, given the generally low investment possibilities, investors from other sectors of the national economy will certainly become more competitive, which will be related to the need to modernize the national property and protect it against depreciation. Hence it will be very difficult to increase the share of residential construction in the investment spending.

There is one conclusion arising from this analysis: the chances to increase outlays on housing under the current conditions are slim, though a comparison of the cited data reveals some theoretical possibilities. This, however, would require a consistent and more effective policy leading to structural changes in the entire economy. In what is a serious shortcoming, the government document that I have referred to envisions no essential structural changes.

One should not forget, however, that the possibilities for growth in the number of newly built apartments depend not only on the macroeconomic factors. They are affected also by other factors such as, for example, the possibility to gain and improve building sites, obtain and use materials and equipment, apply new technologies, organize work for productivity, etc. These factors determine the actual effectiveness of investment funds.

Already today, large urban centers are facing the barrier shortage of improved sites for residential building, or even the barrier shortage of any sites at all. Many housing investors will have no site allocations by the year 1990. The foot-dragging on a new land management legislation has slowed down the procedure of expropriations for housing projects. Every month of delay in sorting out the legal issues involved will make better housing effects late in coming. The problem of new sites is not only a legal one. It is primarily a problem of protracted and capital-intensive investments which will swallow up a sizable part of the outlays earmarked for residential construction. It is also a problem of time. New sites must be gained and improved with a proper head start on house building itself. The present state of affairs in this regard is very disquieting.

Shortfalls in the supply of materials, elements of finishing equipment, and power tools have been described so many times that they can be left out here. But one can hardly overlook the colossal waste (and thievery) which are a fact on many building sites.

The questions of technology call not so much for a debate (of which we have had enough already), as for decisions, when seen against the necessity of reducing the costs of materials and waste. In this connection it is a puzzling fact following from the mentioned report, that the Construction Ministry envisages no possibility (because no need, apparently) for relevant technological changes in residential construction by the year 1990.

Meanwhile, the material and financial reserves residing in technologies appear really worth tapping, as do those due to the organization of work, the standard of which continues to be disastrous, leading to an embarrassingly low productivity rate and high costs. I believe that this is a source of substantial possibilities to expand residential construction with the outlays already available. This, of course, is not enough to completely make up for the apartment shortage, but under the circumstances every effect, which in this case can be not insignificant, is not to be spurned.

The demand for apartments is immense and steadily growing, though defining its exact size is a problem and so we can only rely on estimates. The authors of the report that I have mentioned quote estimations done by the Institute of the Environment, according to which the total housing needs by the year 1990 will have amounted to 4.5 million apartments (2.4 million apartments were built in the decade of the 1970's). The 4.5 million figure breaks down into the so-called statistical deficit at the end of 1980--1.7 million apartments; the demographically conditioned increase--1.5 million; and the need for apartment replacements--1.3 million. We read further on in the report that about 50 percent of originally single-person households

inhabited not independently (estimated at about 864,000 in 1978), such as elderly parents living in with their children, for example, will not apply for new apartments. On this account the demographically conditioned housing needs may decrease by 300,000 by the year 1990. It is also assumed that the actual apartment replacement (through demolition) will be running at a level of 300,000 apartments by the year 1990.

Allowing for the above, it is projected that the housing needs in the current decade will amount to about 3.2 million apartments. Taking into account the figure of about 570,000 new apartments built in the years 1981-1983, the complete satisfaction of these needs would require commissioning about 370,000 apartments annually between the years 1984 and 1990. Reaching this rate appears hardly feasible, if we consider the figure of about 200,000 apartments built annually over the past 3 years, as well as the target of 530,000-590,000 apartments in all, provided for under the 3-year plan.

It can be calculated that the report drawn up by the Institute of the Environment is an estimate of the statistical deficit of apartments, because it had assumed that the index of the number of apartments per 1,000 of the population at the end of 1980 would have been 327, whereas the actual index at that time was 284 apartments. Let us ask if this was many or too few? We can refer here to an international comparison (Table 1). It follows from it clearly that the mentioned index is very low for Poland against the background of other European countries (except Ireland). Equally low in this context is the standard adopted by the Institute of the Environment to estimate the statistical deficit of apartments for the year 1990.

Table 1. Number of Apartments per 1,000 Population in 1982

| | |
|----------------|------|
| Bulgaria | 333 |
| Czechoslovakia | 349 |
| Poland | 284 |
| Hungary | 348 |
| Austria | 410* |
| Belgium | 400* |
| Denmark | 427 |
| France | 437 |
| Holland | 354 |
| Ireland | 271 |
| West Germany | 418* |
| Switzerland | 437 |
| Sweden | 441 |
| United Kingdom | 388 |

*1981

Source: Wl. Dominiak, op. cit.; author's calculations for Poland.

Obviously, the comparisons like the above one are not entirely precise, because they leave out the demographic structure of households, apartment area, number of rooms, standard of comfort, etc. But if we took those factors into account, Poland's position in this comparison would not improve. Rather, the difference would be even greater.

How come the housing situation in Poland is so difficult? This is again an issue deserving a separate analysis. But we can refer there to only one reason (Table 2). Throughout the postwar years Poland yearly has built less new apartments than there have been new marriages. For example, in 1978 Finland built 1,800 new apartments per 1,000 of new marriages, Norway built 1,700, Sweden 1,400, Denmark, Holland, France and Spain built 1,200 each. This explains to some extent the differences between indexes found in Table 1, and the differences between the actual housing situations.

Table 2. Number of New Apartments per 1,000 Marriages in Poland

| | | | |
|------|-----|------|-----|
| 1955 | 344 | 1977 | 816 |
| 1960 | 382 | 1978 | 869 |
| 1965 | 855 | 1979 | 871 |
| 1970 | 693 | 1980 | 707 |
| 1975 | 749 | 1981 | 579 |
| 1976 | 807 | 1982 | 589 |

Source: Independent calculations based on GUS (Central Statistical Office) yearbooks.

Proceeding from the indexes showing the number of new apartments per 1,000 population, one can attempt an approximate evaluation of the future housing needs. Below I present my own estimate by the year 1990 in two variants.

In variant A, I assume achieving the index of 350 in the year 1990 (i.e., the rate of Czechoslovakia and Hungary in 1982). In variant B, I envisage the index of 400, or one corresponding to those achieved by West European nations, which have solved the housing problem in quantitative terms.

Assuming that the most optimistic variant of the housing program is implemented by the year 1990 and we will have built 2.42 million new apartments in the years 1981-1990, we will carry the following deficit into the 1990's:

--According to Institute of the Environment (IKS)--2.1 million apartments, a higher deficit than in 1980;

--According to the IKS variant revised upward by 0.8 million and allowing for the depreciation of old resources

--in variant A--2.7 million;

--in variant B--4.7 million.

Looking further into the future and assuming that we will build the crucial 300,000 apartments a year in the forthcoming decade, we will have to wait several more decades to arrive at the level of 400 apartments per 1,000 of the population, allowing for demographic and apartment replacement forecasts. This alone is the right context for the target of 300,000 apartments annually, because it makes us aware how urgent is the need for a change of approach to the housing economy. What is needed here is not just a realistic approach, but imagination, not just a statement of the impossible, but a restructuring

of the economy toward expanding the residential construction capacity beyond the slim margin to date. Failing this, we will carry the burden of unresolved housing problem not only into the start of the 21st century, but also into its second quarter-century.

Table 3. Forecasts of Housing Needs by the Year 1990

| | Variants of forecasts | | | |
|--|-----------------------|--|------|------|
| | IE forecast | IE forecast revised through ministerial program | A | B |
| Statistical deficit for end of 1980 in million | 1.7 | 1.7 | 2.5 | 4.3 |
| Increase of demographic needs in million | 1.5 | 1.2 | 1.3* | 1.5* |
| Replacement needs in million | 1.3 | 0.3 | 1.3 | 1.3 |
| Total of new apartments needed by 1990 in million | 4.5 | 3.2 | 5.1 | 7.1 |
| Mean annual number of new apart- ments turned over for use in thousand | 450 | 320 | 510 | 710 |
| As above, excl. replacement | 320 | 290 | 380 | 580 |

*Demographic increase is assumed at 3.8 million persons (1981-1990).

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PLAN FOR 1985 FAULTED ON LIVING STANDARD GOALS

Warsaw ZYCIE GOSPODARCZE in Polish No 39, 23 Sep 84 p 8

[Article by Lucyna Deniszczuk: "Draft CAP: The Standard of Living"]

[Text] The preliminary provisions of the CAP for 1985 were published prior to the formulation of the strategy of socioeconomic growth for a longer period of time. This is certainly a shortcoming which hampers the appraisal of many of the proposed moves in the longer perspective; besides, it reduces the public consultation of the initial version of the plan to a comparison of its provisions with the expectations of individual groups or milieux. A reader of the preliminary draft has trouble appraising the course of the implementation of the whole plan for the years 1983-1985 in view of the scant statistical information about the period preceding 1985.

In comparison with the aims formulated in the National Socioeconomic Plan for 1983-1985, the CAP for 1985 puts more emphasis on the need for overall market equilibrium, the attainment of which is the fundamental aim of the plan, while at the same time being an impediment to the implementation of detailed plans, especially with regard to the satisfaction of the day-to-day needs of society.

Income Forecast

The CAP projections for 1985 lack data on the acceptable growth of nominal incomes of the population, especially in cash. Therefore it is hard to predict whether the proposed moves will help achieve equilibrium or not.

Indirectly, it can be inferred that in the variant envisaging a growth of real incomes by 1-1.5 percent, the growth of nominal pay will be in the area of 10-11 percent, while in the zero-growth variant the growth of incomes would be correspondingly lower. This seems highly optimistic in view of the permanent pressure for the growth of incomes (which is easier to attain in industry) and the lack of sufficiently effective control instruments. It is possible that the authors of the plan will provide appropriate tools, e.g., in the form of tax, but for the time being the CAP projections do not contain a complex program of control over the population's incomes.

In connection with the promised growth of employment in social services, especially education, health protection and housing, it is planned to lower the degree of rewarding the growth of productivity in industry in order to find in this way the means for wages for the newly hired labor in the service sector. It is assumed that the "shift" of labor will be accomplished without diminishing pay differentials between those employed in social services and industry.

The question arises whether the scope of these shifts (the 3 percent growth of the share of employment outside industry in overall employment) will be possible, given the present labor shortages in the economy, including the areas in which incomes are high. It should rather be expected that the improvement of employment in social services will require at least a partial elimination of the income differentials and therefore will stimulate the overall income growth.

The assumptions of the plan for 1985 do not list the adopted solutions with regard to social benefits in cash. According to initial estimates, the average pension is going to increase by only 4.1 percent next year and the whole growth will be attributable to the higher amount of the newly awarded pensions. This would signify a further drop in the ratio of the average pension to the average pay (from 44 percent in 1984 to some 41 percent) as well as a further deterioration of the economic situation of all pensioners receiving pensions awarded earlier, unless pension indexation is introduced.

As the planned growth of prices will affect some elementary goods and services (selected food items, rents in municipal flats, etc.) their effects will be felt most painfully by those pensioners who receive the lowest pensions. Although the document submitted to consultation promised the pursuit of an identical policy in relation to pensions as to incomes, i.e., either the maintenance or a 1-1.5 percent growth of their real value, it is obvious that unless the nominal amount of pensions is raised through indexation, their real value will drop even if the planned retail price rises are not exceeded, which is not at all certain. Therefore there are plans for bringing forward the starting date of the indexation of pensions to the growth of the cost of living, originally planned for the beginning of 1986, 4 or 6 months (i.e., from September or July 1985).

As regards family income supplements, both their nominal value and the number of people receiving them are to decline in 1985. The main reason for the drop is the fixed ceilings of incomes below which parents are authorized to obtain increased family supplements or paid child-care leaves. In view of the fast growth in nominal incomes and especially wages, more and more families lose the right to draw these benefits. In reality, this translates into a departure from the policy of granting financial assistance to families with small children. Unless this problem is solved, e.g., through the provision of more nursery schools, families with children will be forced to live with a drastic--if temporary--deterioration of their financial situation.

Neither do the CAP provisions say anything about the projected incomes of private farmers. Initial estimates indicate that, at the projected level of production and procurement of produce and unchanged procurement prices, the money incomes of farmers will rise by some 7 percent in 1984, including a 5.4 percent growth of incomes earmarked for consumption and nonproductive investments. The growth of farmers' incomes would then be lower than the growth of incomes of wage-earners, which would again open the debate on the principle of income parity between farming and nonfarming population. This debate certainly stems from a political background, but the resulting decisions produce definite economic results. In view of the faster growth of farmers' incomes in recent years and also taking into account the general aims of next year's plan, it would be important to ensure that a possible faster growth of farmers' incomes should depend only on production performance.

No Change on the Market

It is assumed that the supplies and goods and services for the population will increase next year by some 4 percent, i.e., at a similar rate as in 1984. However, in current prices, the value of deliveries projected for 1985 is to increase by some 13 percent, compared to the 18 percent growth planned for the current year.

The authors of the 1985 plan present two variants of using the growth of consumer goods supply. It appears that the first variant (which is backed by the Planning Commission) that envisages using the whole growth for improving market equilibrium, mainly through a further rebuilding of inventories, deserved support. It is true that the figures contained in the document speak of an identical growth of inventories as in 1984, which--given the planned growth of nominal money incomes of the population--may not only be too little to ensure market equilibrium but actually lead to its deterioration, but there does not appear to be a better alternative.

It must also be remembered that the possibilities of attaining a tangible improvement in consumption would practically be the same, whether the variant of zero-growth of real incomes is adopted or the rival variant of a 1-1.5 percent growth, given similar changes in the distribution of incomes (which also speaks in favor of the first variant). However, it is difficult to accept the assertion that the adoption of the first variant will mean that the inflation gap will not appear. At best, it can be expected that the inflationary overhang will not increase--but even that is not possible as some additional Zl 160 billion will land on the market when the savings bonds (issued in 1982 to offset the drop in real value of the money kept in savings accounts--ed.) will mature.

There will be no major shifts in the structure of market supplies in 1985. The reconstruction of the market for industrial consumer durables will still proceed at a slow pace (6 percent in real terms). With regard to some goods, e.g., radio-cassette recorders, color TV sets, washing machines and spin driers, vacuum cleaners, sewing machines, footwear, soap and washing powder, the 1979 level of supplies was already surpassed this year.

Nonetheless it is still difficult to attain equilibrium on these markets. Next to the purchasing power of the population, demand is also shaped by population trends, the replacement needs and the general state of the market as well as the value of the zloty, which may be an incentive or a disincentive to saving. From this point of view, overall market equilibrium is essential to attaining equilibrium in individual segments of the market.

Housewives will continue to hunt for kitchen enamelware and fabrics. The improvement in this respect will be unnoticeable as the supplies will reach 50-60 percent of the 1979 level.

A much more difficult situation can be observed on the food market. Meat and sausage supplies will be lower than those effected in 1983 but slightly higher than in 1984 (by 1.7 percent). A similar situation will obtain with regard to the deliveries of animal fats and butter and of ripening cheeses and chocolate products. The level of fish supplies and that of fish preserves will stay at the 1984 level.

However, the deliveries of cottage cheese, milk, eggs, vegetable fats, pasta and kasha will go up, although the volume of kasha will be several percent below the 1979 level. Therefore, it does not appear likely that it will be possible to abandon rationing in 1985. Still, rationed goods will be more easily available and more will be supplied to canteens and restaurants.

How Many Calories a Day?

It is extremely difficult to assess the state of the nation's diet. A comparison of the figures given in the preliminary version of the plan with physiological norms suggests that the attained level is satisfactory. However, there are doubts both with regard to the method of calculation and the interpretation of the results of such a comparison. The 1984 situation was probably examined on the basis of the product balance method. But the confrontation of the figures thus obtained with the studies of family income points to considerable differences. For example, the studies of family budgets say that in 1983 the average Pole consumed 2,940 Kcal a day, including 80 grams of protein, of which 47 grams was animal protein, 127 grams of fats and 394 grams of carbohydrates. On the other hand, estimates of the Food and Diet Institute put the number of calories at 3,425 Kcal, protein at 90 grams, including 52 grams of animal protein, fat at 118 grams and carbohydrates at 500 grams.

As can be seen, consumption calculated according to the balance method is higher. This is partly a result of not taking into account the loss of food en route from the producer to the customer.

Appraisals of the state of a nation's diet in international comparisons usually rely on studies of family budgets. On the other hand, the balance method, which is also widely used, rather offers an insight into the food supply potential in a given period of time. Therefore if the authors of the annual plan wished to appraise the state of nutrition of society, they should analyze the data contained in family budgets. Of course, they could

only do it with regard to 1983, whereas the figures given in the document only speak of the projected food supply in the current year, which is known to be more difficult than 1983.

Also the comparison of the food consumption figures with nutrition standard arouses objections, if only because it is not known which standard was applied. Judging by the amount of nutritive factors, this was the B norm, i.e., sufficient nutrition at a moderate cost. Similarly as other norms, also this one is different in relation to physical strain in work. It is also higher for pregnant women, nursing mothers and for children according to age. Therefore, in order to give the nutrition norm for a statistical Pole in a given period of time, it would be necessary to weigh the result by the structure of population.

It should be also mentioned that for many years doctors and nutrition specialists have urged the use of a much higher nutrition standard for children and youth, namely the full-value D standard. Therefore, taking into account the kind of work (8 million people work hard, including 1 million who work very hard) and the population structure of Polish society (the baby booms), it would turn out that the comparison of the actual food consumption with the norms is not as successful as this document suggests.

Studies have shown that the level of nutrition in many families, especially ones with many children, is low. Some 50 percent of all children live in very low income families, where the level of malnutrition is the highest. Therefore school meals are so important. More broadly, the same could be said of canteens and cafeterias, which offer the best possibility of ensuring sufficient and rational nutrition to the population at relatively the lowest social cost. This problem was successfully solved in the GDR.

The Pricing Policy

It is assumed that retail prices should not rise by more than 9 percent next year, with 6 percent being the result of the rises in the official prices of raw materials and higher rents in city-owned flats, while the remaining 3 percent will be due to an increase in the sales tax on some nonessential commodities and to the increase in produce procurement prices introduced in mid-1984.

The maintenance of price growth within these limits would be a spectacular confirmation of the stabilization of the economic situation of the country and a remarkable lowering of the rate of inflation from three digits in 1982 and two digits in 1983-1984 to one digit only. However, the feasibility of the plan should be doubted, not only because of the weak instrumental means but also the real reasons of the inflation, such as work of industrial plants below capacity, high pay for low productivity and the effect of investment processes on inflation (too big a share of projects with long gestation periods, especially among the projects formerly classified as "central" but now transferred to enterprises), as well as some financial arrangements (e.g., in construction).

In the absence of mechanisms limiting the permanent growth of costs, the maintenance of a much lower growth of prices may mean the necessity of continued subsidies to the production of some consumer goods, especially food.

The existing pricing principles actually encourage the growth of prices rather than limiting it. The principle of calculating prices on the basis of warranted costs remains in force in 1985. On the other hand, [foreign] transaction prices are going to be gradually introduced in relation to raw materials (in practice, their application is so far very limited) and may also be used as the indicator of the upper limit of price growth.

The introduction of such limits is a novelty in pricing. They are going to apply to the retail prices of goods and services. The price limits, as well as the principle of basing prices on warranted costs, signifies the necessity of permanent detailed control of enterprises, despite the fact that experience has shown the effectiveness of such control to be limited.

Even if the assumed relatively low growth of prices is achieved thanks to bigger subsidies from the state budget to producers, and the planned growth of incomes is surpassed, at the beginning of the next 5-year period it will turn out that another round of huge price rises is inevitable.

Housing

It is expected that the number of new apartments in 1985 will stay at the 1984 level (190,000 flats with 13 million square meters). However, that will be slightly less than in 1983 (by 2.5 percent) and it is to be attained with a 2 percent reduction in outlays. It can be assumed that the barrier to bigger output is the investment capacity of Poland's economy in general. The planners also envisage the possibility of economizing some materials, which might facilitate the building of an additional 5,000-7,000 apartments at a cost of Zl 11-12 billion.

It seems that if such economies were indeed made, the available surplus of materials would easily be absorbed by the market (even if the rationing restrictions stayed in force). They would be used for the completion of the private housing construction projects already under way and for repairs and modernization. It can be assumed that in view of the serious shortages of building materials (except cement and--locally--bricks), the purchases would be wholly financed by private persons. The growth of market supply of these materials would help to limit corruption and profiteering in this area.

Increasingly often, questions are being asked about the policy of using the existing housing resources. The matter must be addressed quickly in view of the often unjustified considerable differences in the cost of rent (hence the rent rises in town-owned flats) and of the stagnation in turnover in apartments which is quite irritating at a time of an acute shortage of housing. It appears that instead of multiplying obstacles and the costs involved in exchanging flats, the authorities would do well to find effective ways of stimulating apartment exchange.

The maintenance of housing resources, including cooperative ones, is largely subsidized by the state budget (to the tune of over Zl 85 billion). We do not think this is fully justified from the social point of view. Those people who have flats of their own are in a better position from the point of view of the satisfaction of their needs than those who do not, therefore they could and should cover the cost of their housing on their own. Instead, the state could give more assistance to the households saving toward their own flats rather than subsidizing investors, who have not the strength nor the will to exact a growth of construction.

Other Needs

The evaluation of the living conditions of the population also includes the state and quality of the satisfaction of needs with regard to health care, education, culture and recreation.

The situation in health protection is going to improve mainly due to a growth of employment, as the growth in the number of hospital beds--at just over 4,000--will be similar as in 1984, with only a somewhat higher growth in psychiatric hospitals, but even that will not keep pace with the fast growth of needs (alcoholism, drug abuse) which at present by far exceed the possibilities of providing hospital treatment.

The plan for 1985 does not envisage the solving of the problem of ensuring adequate supplies of medicines, sanitary materials and medical equipment, both Polish-made and imported. This is quite disturbing. It appears that various possibilities of increasing supplies should be examined in order to avert a deterioration of the present state of affairs.

The extremely difficult situation in education will improve only slightly. The baby boom which started some years ago has boosted the demand for educational services, while the poor condition of the material base prevents a fast improvement of the state of preschool and school education. Some 60,000 children still cannot find places in kindergarten and many schools work two or three shifts. In individual cases, a lot of improvement could be achieved through local initiative. In the next 5-year period it is planned to embrace educational investments with government orders.

The provision of organized holiday has been appraised as one of the major achievements in Poland's social policy. In 1977, which was the best year so far, almost 5 million people took advantage of various forms of organized holiday, while in 1982 the number dropped to as low as 3 million. In the first year of the implementation of the plan of economic stabilization, the number increased to 3.7 million but the plan for 1985 envisages the maintenance of this number at the 1984 level, i.e., between 3.4 and 3.5 million.

The authors of the plan suggest that this is the result of a growth of interest in private holiday. This may be true but this surge of interest is caused by two factors: one is the cost of organized holiday, the other is the deterioration of the condition of recreational facilities and the quality of holiday services. In 1983, the average cost of holiday per person

was Zl 6,150. Among those taking advantage of organized holiday, 38 percent had a part of the cost refunded by their employers. The role of factories and institutions in organizing and financing the holidays of the people is quite big. Enterprises spend 60-65 percent of their total welfare funds on financing the rest and recreation of their employees and their families.

The financing of holiday activity is hampered by the need to spend huge sums on arresting the process of depreciation of holiday facilities. Until recently, part of the costs of running a factory holiday center was counted toward the factory's overall costs. Since the introduction of the economic reform, this source of financing has dried up while the enterprises' welfare funds are not sufficiently high to pay for both subsidizing the running of the centers and subsidizing the holiday makers. New regulations are needed here and they should at least be prepared in 1985.

After 2 difficult years, cultural life is becoming animated again. The plan for 1985 envisages a growth of outlays. Book production has been growing especially fast and is to reach 5.7 books per inhabitant, but despite the undeniable improvement, the demand for various kinds of books will not be satisfied. High prices are no obstacle to this high demand. The average price of a book rose from Zl 38 in 1981 to Zl 80 in 1983, i.e., by 131.5 percent, but its relation to average pay has hardly changed.

The plan for 1985 leaves many hopes and expectations unanswered. With regard to living conditions, the plan is modest, which reflects the general economic determinants. In this context, the projected growth of private consumption by 3.4 percent should be regarded as relatively high. There will be a small (0.7 percent) drop in the accumulation fund (including a growth of inventories and reserves and a deep, 8 percent drop in investment fund). The diminishing ability of the economy to invest is bound to arouse concern, especially in view of the aging of productive assets and the fact that industry is still working below capacity. Yet, even this modest plan will only be feasible when there is more discipline and social mobilization, both in labor and on the market.

CSO: 2600/143

PROSPECTS OF FERROUS, NONFERROUS METALS SECTORS VIEWED

Warsaw PRZEGLAD TECHNICZNY in Polish No 38, 16 Sep 84 p 15

[Article by Aleksander Szpilewicz: "What Are We Going To Forge in 20 Years From Now?"]

[Text] When asking about development strategies for Poland's national raw-material programs you are likely to get dismissive answers. As a rule, these programs are not supported by reliable cost-benefit estimates. This is due both to the information gap in the substantive aspect and, in the aspect of value, to the deformation of the role of money.

Raw Materials for Ferrous Metallurgy

Generally, ore resources of iron or accessory metals needed to produce steel (manganese and chromium ores) or special kinds of steel and steel coatings (nickel, molybdenum, tungsten, cobalt, tin) are not economically feasible. Exploitation of domestic ores in the Czestochowa and Leczyca regions has been clearly unprofitable. In 1946 to 1980, output at domestic ore pits amounted to an equivalent of 14 million tons of iron ore at a price of some \$160 for the ton (at the 1983 purchasing power of the dollar), or three times again the current transaction price of iron in imported ore. Aggregate losses incurred due to disregarding the costs of mining domestic ores are estimated to amount to \$1.4 billion. This should be taken as a warning against new attempts at resolving ferrous metallurgy's raw-materials problem in reliance on Poland's own resources, specifically the proven geological ore deposits in the Suwalki region. It should be noted that the above estimate of losses does not embrace the considerable losses to environment that result from metal ore mining and ore-processing mills (as happened in Sabinow or Zebice).

Poland's dependence on imports in this respect is seen from the transaction prices (on cif basis) which amounted to \$1.3 billion in 1983, or \$35 per person. In this estimate, the unit purchase price is assumed to be identical everywhere, because no credible exchange rates of the ruble to the dollar exist.

Ferrous ores and pig iron account for roughly half of these imports. One-third of the imports involves hot-rolled products, cold-rolled steel sheets

and steel pipes. Purchases of concentrated and accessory metals account for one-eighth of all imports. Fire-resistant raw materials and products as well as metallurgical electrodes account for one-twentieth of total imports.

Since 1975, the structure of imports has been deteriorating. Imports of pig iron, cold-rolled sheets and pipes and of accessory metals for upgrading steel quality have declined.

For its iron ore purchases, Poland should gradually reorientate itself toward Third World countries which offer low-silicon ores. Exports of metallurgical products cover one-third of expenses for the total imports of raw materials for steelworks.

Scrap steel and iron are turned out in excessive quantities (8 million tons in 1983) in the Polish economy. This is composed of roughly equal amounts of "intra-factory" scrap (generated by metallurgical works themselves) and "outside" scrap (post-production and useless metal). Improvement can be achieved by observing technological standards, cooperation between metallurgical works, better anticorrosion coating, proper use and storage of metal products, as well as steel product regeneration.

Metallurgical and engineering works should, in their own interest, organize courses in scrap classification, registration, upgrading and regeneration. This may help these works improve the quality and endurance of their products, bigger gains of steel per ingot, as well as savings of energy and alloy metals.

As for the scenario for ferrous metallurgy, the latter must be generally oriented in the future to the production of quality rather than raw steel. Steel consumption in terms of raw steel should stabilize at roughly 18 million tons. Steel melting should stabilize at the 1980 level of some 19 million tons because cooperation with foreign partners will inevitably result in steel leftovers for Poland.

The first precondition for achieving the economy's basic target (a 1.5-fold income increase) will be a steady rise in the output of usable steel. This involves steel which is supplied in the form of products for the engineering industry and infrastructural facilities; its proportion in relation to raw steel should increase from 60.5 percent (1983) to 78 percent (in the year 2000). This would mean for Poland reaching the present-day level of the advanced countries and some Third World countries. The economy's steel-consumption intensity, i.e., the expense of raw steel per income unit value at comparable prices, should fall by 25 percent from the current level (of 1983).

Deliveries of metallurgical products for the engineering industry would increase 1.4-fold from the current (1983) level.

Deliveries of metallurgical products for infrastructural facilities (construction projects, mines, railways, the power system) would then increase 1.7-fold. Losses in the process of refining raw steel into usable steel,

including losses incurred by metallurgical works themselves, should decrease by one-third, i.e., from the 1983 level of 6 million tons of raw steel to 4 million tons by the end of this century.

Scenario for Ferrous Metallurgy

| million tons | Facts | | | Scenario | | | |
|--|-------|-------|-------|----------|-------|-------|-------|
| | 1985 | 1980 | 1983 | 1985 | 1990 | 1995 | 2000 |
| Molten steel | 15.0 | 19.5 | 16.2 | 17 | 19 | 19 | 19 |
| net imports (+) | 1.3 | - | - | - | - | - | - |
| net exports (-) | - | 0.2 | 1.0 | 1 | 1 | 1 | 1 |
| Raw steel | 16.3 | 19.3 | 15.2 | 16 | 18 | 18 | 18 |
| built-in losses in processing (-) | 6.0 | 8.0 | 6.0 | 6 | 6 | 5 | 4 |
| Usable steel | 10.3 | 11.3 | 9.2 | 10 | 12 | 13 | 14 |
| gain (%) | 63.2 | 58.5 | 60.5 | 62.5 | 66.7 | 72.2 | 77.8 |
| of which: | | | | | | | |
| for engineering industry | 3.9 | 7.0 | 6.2 | 6.5 | 7.0 | 8.0 | 9.0 |
| for infrastructure | 4.4 | 4.3 | 3.0 | 3.5 | 5.0 | 5.0 | 5.0 |
| Income produced | | | | | | | |
| (billion Zł, 1 Jan 77) | 1507 | 1701 | 1416 | 1500 | 1800 | 2000 | 2000 |
| million dollars (1983) | 83.7 | 94.5 | 78.7 | 83.3 | 100.0 | 111.1 | 122.2 |
| Steel-intensity of income in terms of raw steel: | | | | | | | |
| kg/,000 Zł (1 Jan 77) | 10.82 | 11.35 | 10.73 | 10.67 | 10.00 | 9.00 | 8.18 |
| kg/,000 dollars (1983) | 195 | 204 | 193 | 192 | 180 | 162 | 147 |

Author's own estimate: Full scenario with an outline of energy forecast (Warsaw, June 1984).

Raw Materials for Nonferrous Metallurgy

Generally, Poland has substantial copper and zinc-lead ore resources. Silver is an important coproduct of these two latter minerals. No economic raw materials for aluminum production occur. Hopes for substituting domestically produced aluminum-containing ores or ash from power-generating stations for imported aluminum oxide have proved illusory in the nearest future (as this requires considerable expenses of energy and money).

As for copper, the current resources (up to workable deposit depths) limit extraction levels which are close to current (i.e., 1983) copper-mine output capacity. This means that extra copper-mine capacities installed earlier will have to remain idle. The necessity to pay off the debt will require the exportation of one-half of all the copper produced, and also of silver, both of which will have to go abroad unprocessed because of imports barriers.

The great depth of copper deposits is seen in the relatively high labor and energy costs per ton of processed copper. The same is true of transaction prices of the produced metals, i.e., copper and silver.

In my estimate, labor costs accounted for 38 percent and energy used for mining and processing for 28 percent of the transaction price of the metals produced (copper and silver) at the Lubin mining and metallurgical industrial combine in 1983. These two cost items thus add up to 66 percent of the final product's transaction price. But other cost components have to be taken into account to make the analysis complete.

Labor and Energy Costs at Lubin Industrial Combine, 1983

| | |
|--|----------------------------|
| Mean employment | 36,000 people |
| Workhours paid (2,000/year) | 72 million h |
| 1. Labor cost (\$3/h) | \$216 million |
| 2. Energy | \$164 million ^a |
| Total 1+2 | \$380 million |
| 3. Transaction value of copper (\$1,453/t) | \$412 million ^b |
| 4. Transaction value of silver (\$335/kg) | \$164 million ^c |
| Total 3+4 | \$576 million |

- a. Outside electric energy 2,306 GWh; low-methane natural gas 221 million m³; liquid fuels 37,000 tons; hard coal 422,000 tons; coke 185,000 tons; less heat supplied to other users 2,247 TJ.
- b. 360,000 tons at \$1,453/t; sales price according to Central Statistical Office at Zl 100 for the dollar.
- c. 678 tons at \$335/kg; sales price according to Central Statistical Office at Zl 100 for the dollar.

The copper industry is of relatively recent vintage in Poland. National output of refined copper amounted to 4.1 million tons, 0.6 million tons of it in 1946-1970 and 3.5 million tons in 1971-1983.

Zinc and lead deposits are much smaller than copper deposits. In order to maintain zinc output at its current (1983) level substantial mining and replacement investment will have to be made. There is no way by which the record-high output level of 1975 could again be reached, especially since the output level at that time was propped by supplementary zinc and lead imports from the West. The falling metal contents in Polish ores is also an irreversible process.

Zinc sales, which used to be a stock export item of Poland in the period between the two world wars and afterwards (through to the mid-1970's), have been steadily declining with no chance for recuperating. Domestic output will hardly suffice to meet domestic demand. In a dozen years or so from now, Poland will probably have to triple its supplementary lead imports in relation to the 1983 level.

Labor and Energy Costs at Zinc and Lead Mining and Metallurgical Enterprises, 1983

| | |
|--|----------------------------|
| Mean employment | 20,000 people |
| Workhours paid (200 h/year) | 40 million h |
| 1. Labor cost (\$3/h) | \$120 million |
| 2. Energy | \$123 million ^a |
| Total 1+2 | \$243 million |
| 3. Transaction value of zinc (\$732/t) | \$124 million ^b |
| 4. Transaction value of lead (\$409/t) | \$ 33 million ^c |
| Total 3+4 | \$157 million |

- a. Outside electric energy 1,531 GWh; high-methane natural gas 50 million m³; liquid fuels 5,000 tons; coke-oven gas 10 million m³; hard coal 343,000 tons; coke 320,000 tons.
- b. 170,000 tons at \$732/t; sales price according to Central Statistical Office at Zl 100 for the dollar.
- c. 81,000 tons at \$409/t; sales price according to Central Statistical Office at Zl 100 for the dollar.

The difficult deposition conditions and the low metal contents in the ores have been visible in the spiral of labor and energy cost in relation to the transaction value of the produced metals (zinc and lead).

In my estimate, the costs of labor and energy used for the production and processing of metal ores surpass the transaction value of the metals substantially. This industry is, and will be, doomed to receiving considerable subsidies. But for a full analysis it is necessary to take account of other cost components.

This industry is old in Poland. Since 1946, Poland produced 5.5 million tons of zinc, of which 2.6 million tons was turned out in 1946-1970 and 2.9 million tons in 1971-1983.

Analogous figures for lead are 1.7 million tons in all, 0.8 million tons for 1946-1970 and 0.9 million tons for 1971-1983.

As for aluminum, total domestic output is dependent on aluminum oxide imports. The Konin aluminum plant covers less than one-third of the current consumption (1983). So, imported aluminum blocks and manufactured products account for most of the aluminum used in Poland.

The high energy intensity of aluminum production in Poland is seen in the indicator of 21 MW energy consumption per ton of aluminum. The transaction value of energy (which is \$48 per megawatt-hour) generates an energy cost of \$1,008 for 1 ton of aluminum. The equivalent of this, namely 2 tons of aluminum oxide, can be bought for \$250 for the ton. On aggregate, the cost of the raw material and of energy amounts to \$1,258 for 1 ton of aluminum.

or 94 percent of the price to be paid for imported metal (\$1,337 for the ton in 1983, at Z1 100 to the dollar).

These relations will not change significantly in the future. It is therefore reasonable to adopt as a strategy the covering of increasing demand by importing this metal, for this is more justified than the development of domestic aluminum production in reliance on oxide imports.

In my view, aluminum imports will have to double within the period considered over the 1983 level.

In a scenario for nonferrous metals, the top goal is to restore total and partial equilibria, specifically the abandonment of crisis-generating huge projects in developing mining capacities for raw materials and a general switchover to investing in environment-protecting undertakings.

This explains the caution in defining quantitative levels in the production and exports of copper as well as in the production and imports of aluminum. Great significance should be attached to organizational and technical progress in the manufacturing of nonferrous metals, coating techniques, nonferrous scrap utilization, and the use of nonmetallic substitutes (glass fibers, etc.).

CSO: 2600/141

ADHERENCE TO PROPER AGRICULTURAL SCHEDULE EMPHASIZED

Best Grain Schedules

Warsaw GROMADA-ROLNIK POLSKI in Polish 2 Sep 84 p 5

[Article by Krek: "Early Sowing -- Ample Grain"]

[Text] The by-word "As you sow, so shall you reap" is exceptionally applicable these days. All the more so since in delaying harvests and piling up work, there is the fear of running into the time for planting winter crops. This could cause large losses in next year's harvests. Rye, wheat and barley from late plantings are usually less developed. Even by sowing more densely, thus ensuring a more compact stand, it is difficult to make up the losses in the harvest. Prof Dr Marek Ruskowski, a recognized specialist on grain cultivation from the Institute of Cultivation, Fertilizing and Soil Science in Pulawy, is of the opinion that running beyond the optimal period for planting grain, widely prevalent in our country, is one of the basic reasons for a grain harvest that is unimaginably poor. It is, therefore, worth remembering the optimal periods for planting. They are:

Rye: 10-20 September (in the northeast), 15-20 September (in the east and southeast), 20-30 September (in the northwest, west, and southwest). A delay in planting of 7-10 days is permissible (on soil under good cultivation).

Winter wheat: 15-25 September (in the northeast and east), 20-30 September (east and southeast), 25 September-5 October (in the northwest and west), 25 September-10 October (in the southwest).

Winter barley: the first 10 days of September (in the north, west and east), the middle of September (in the southwest and southeast regions).

In addition to planting time, the quality of the seed is important. Only healthy and well-developed seed can yield strong and fruitful plants. Using seed produced on the farm generally results in deterioration in the physiological properties of the grains. If we decide to use grain produced on the farm, we must select a suitable portion of the dry, clean seed of the same variety. This must be grain free of weed seeds, seeds of other cultivated plants, waste material or overripe seed. It is necessary also to treat the seed to prevent diseases.

Long-term field experience indicates that the greatest potential for germination, which means reliable harvest, can be ensured only by using certified seed for which the Stations for Seed Evaluation issue certificates of quality. Please remember that in buying certified seed within the framework of the planned renewal, the farmer benefits from a decrease in price of 300 zlotys per quintal.

Field Work, Animal Raising

Warsaw GROMADA-ROLNIK POLSKI in Polish 4 Sep 84 p 12

[Article by Antoni Swiderski and Ewa Obidzinska: "Agricultural Calendar"]

[Text] This year's significant delay in harvests complicated the normal course of stubble cultivation. There was a great piling up of field work in August. Despite this, many farmers in regions with light soils plowed up the rye stubble between the rows. We know, of course, that plowing waste material under is one of the basic preventive, agrotechnical measures that affects harvests in subsequent years. Driving along the road from Wroclaw through Kepno, Sieradz and Piotrkow to Warsaw at the beginning of September, it was pleasant, therefore, to look at the more numerous plowed-up stubble fields. There were also more plantings of lupine yellowing in the fields.

It is evident that the farmers' traditions are overcoming the disregard for these important, crop-producing factors that seemed apparent in past years. This is evidence that if one understands and has the desire, all difficulties can be overcome.

In the Field

Waste material must be plowed under without delay in places where this could not be done in August. Plowing waste material under, even shortly before plowing for planting, is beneficial for winter crops. The plowed land must be harrowed without delay. Where it had been plowed earlier, if weeds sprout, it should be harrowed again.

During these post-harvest operations, the fields should be limed. The lime will then be more completely mixed into the soil. Its action will be more effective. Liming is necessary in any place where the soil reaction is even slightly acid. This can be checked on soil resource maps in the gmina or with an agronomist from the Provincial Center for Agricultural Progress. In general, however, we have little soil in our country that does not require liming. All cultivated plants, even rye, yield better if the soil contains the necessary amount of lime. Lime, like nitrogen, phosphorus and potassium, helps make up the plant mass of cultivated plants. Without liming the soil, we will not get higher yields.

Plowing for rye should be done at least 2 weeks before planting. In practice, this must be done in the first days of September. Only in rotation after root crops or a land for winter crops be cleared and cultivation be

simplified. The planting plowing must be followed immediately by harrowing. Where the waste material is clean and has not been plowed in already, the planting plowing should be done with a skim plow so that the upper layer of soil, together with the waste material, is turned to the bottom of the furrow. Phosphorus and potassium fertilizers may be applied during plowing. Plowed in deeper and mixed with the whole plowed layer, they are more effective even in dry years. In some western provinces, in the first 10 days of September, rapeseed must still be planted.

Winter barley must be sown in the first 10 days of September, and no later than the middle of the month.

Rye must, of course, be sown in September. But in northeastern regions, by 10 September. In central regions, up to 20 September.

Wheat should also be planted in September, at the latest, in southwestern regions up to the first 10 days of October.

Seed grain should be exchanged for certified seed. It should, of course, be treated before planting. Rye also! Rye that is not treated is affected by fungus diseases in the winter and can be lost. Do not, therefore, be too stingy to spend 20 or 30 zlotys on grain treatment. Treat it adequately, and not simply with a whip in the seeder.

The warmer days in September should be used for gathering potatoes. These should be dug when the skin of the potatoes is not so old that the pressure of a finger can remove it. Potatoes dug during warmer days keep better. Moreover, the work of digging is not as onerous as it is later in the fall. When potatoes are dug early, winter grains can be planted on time.

After potatoes are dug, they may be covered temporarily with straw to dry. They should be sorted and the planned amount sold; the rest should be prepared for storage. It is best to steam and ferment those intended for fodder, adding green fodder or root fodder.

The last alfalfa cutting should be done before 10 September. Later cutting weakens the alfalfa and much of it is lost during the winter.

Seed clover should be gathered dry.

Corn and sunflower seed should be gathered before frost.

In the Garden

Orchard fruit should be gathered before it gets overripe. Fruit picked later keeps poorly. It should be shaken down and rotten or dried, "mummified" fruit, which is a disease vector, should be separated out.

Strawberry plantings should be cleared of weeds, runners should be cut out, and cow dung should be applied.

Tomatoes that show yellow should be picked and leaves should be cut off. Heads of cabbage plants should be picked. Cleared beds should be cultivated.

In the Backyard

Prepare silos and places for silage piles. Pickle whatever has been picked green, or buy it from the food industry. The first pulp from the sugar factory is richest in sugar. For this reason, it ferments most easily. During this period, there are few takers, and it pays to hurry and get as much as possible in advance.

Pulp should be fermented with chaff or stubble. As much dry material should be added as will absorb all the liquid. There are many nutrients in the fermentation liquid. Keeping them in the chaff or stubble increases the food value of the the fermentation by 15-20 percent. Adding dry mass decreases the overall moisture of the whole fermentation. In this way acetic fermentation is limited in favor of lactic. The product is then more tasty, mild, not sharp, and is more readily eaten by the animals.

Cattle

September is actually the last month for pasturing of cattle, and the September pasture is significantly poorer in food value than in the summer, especially for milk cows. In organizing pasturing, we must take into consideration the fact that in the fall, the grass grows back only half as fast as it does in the spring.

In the fall the cattle are driven to pasture somewhat later and brought in earlier. In times of bad weather, it is best to leave the cows in the barn and give them cut green fodder. Cut green fodder can also be given as a supplement to cattle that go out to pasture.

Six-month heifers should be fed with high volume fodder (green fodder and hay) with an addition of 1.5 kg power feed daily. During this period heifers should gain approximately 800 grams per day, and at a year, they should weigh half as much as a full-grown cow. In feeding heifers more than a year old, power feed may be omitted, but green fodder must be supplemented by root fodder so that the daily weight gain of the heifer is about 600 grams. Heifers should certainly be out in the pasture or in a run; keeping heifers confined delays development of the animals and causes problems with calving.

Both heifers and cows should get Bovimiks or an MMB mix daily.

Horses

Fall is a period of hard work for horses, they should, therefore, be fed quite intensively. Horses working with plows and diggers should get 4-7 kg root vegetables and 4-6 kg power feed daily. Part of the oat ration may be replaced by small beans, but they should be fed after roughage, in a separate

feeding, not mixed with potatoes or oats. Horses must not be given fresh, undried grain, dry rye or beans, or spoiled or moldy fodder since this may result in life-threatening malnutrition.

Pregnant mares may be used for work that does not require tugging or pulling heavy loads, and steady work at the plow is not dangerous for mares.

Five-month-old colts should be weaned since the continuous production of milk excessively weakens a mare that is usually pregnant again. The colt should be separated outright by taking the mare to a different building so that the mother and colt do not hear each other. At this time the mares' feed is decreased and workload increased to stop the production of milk. If there is a tendency toward inflammation of the udders, they should be rubbed with camphor oil.

The weaned colt should be allowed to run as much as possible in a fenced pasture or run, fed with 3-4 kg oats, and 4-5 kg hay. Under no circumstances should the colt be hobbled.

Pigs

Sows should be placed as much possible in single pens since pushing at the trough may result in miscarriages. During the first 100 days of pregnancy, the sow is fed rather sparingly (approximately 3 kg potatoes and 1.5 kg roughage); fattened sows produce small litters. It must be remembered that a properly fed pregnant sow should not gain more than 30-40 kg during pregnancy.

Young pigs intended for fattening following a lean period, sparingly fed during the summer, are now given intensive additional feeding. They are given potatoes, practically as much as they will eat, about 2 kg wheat roughage and skim milk so that in 3-4 months they will weigh 130 kg. Such fattening, less economical than rapid fattening for meat, is recommended for farms that do not have sufficient fodder for the herd.

2950

CSO: 2600/93

ALUMINUM OXIDE PLANT PROJECT

Warsaw RZECZPOSPOLITA in Polish 5 Oct 84 pp 1, 2

/Article. Planning Commission Presidium Conferred"/

/Text/ The Presidium of the Planning Commission of the Council of Ministers examined problems associated with the possible resumption of building the aluminum oxide plant in Nowiny near Kielce. This investment was recognized, in conformity with the Sejm resolution on the NPSG /National Socioeconomic Plan/ for 1983-1985, as a primary central investment for revitalization as adequate economic conditions develop in the country. Prof Jerzy Grzymek, the father of the technology for producing aluminum oxide from raw material, participated in the meeting.

The continuation of research and development work associated with Prof Grzymek's technology and the development of updated technical-economic assumptions were acknowledged as expedient. Among other things, attention should be given here to improvements achieved in technology, significantly reducing the energy-intensiveness of aluminum oxide production. This involves the submittal of the scientific expert reports needed to prepare the final government decision on building the aluminum oxide plant, with a possible change in its current location, determination of the deadlines for starting construction, the scale of production in the future plant, and the extent of investments associated with the environmental protection and water management sphere.

The Planning Commission Presidium also examined material related to the CPR /Central Annual Plan/ draft for 1985 in the field of production, material and technological supplies, the financial-market balance, and foreign trade.

As a result of the public consultations conducted on the CPR assumptions and of additional analyses, the CPR draft for next year has been developed with the idea of strengthening the economic balance.

In examining the financial-market balance problems, a real possibility of making further progress in rebuilding trade resources and in stemming the increase in the inflationary gap next year was found. An initial discussion of the draft, elaborated by the Polish National Bank, to balance the financial income and outlays of the people for 1985 for the purpose reciprocal synchronization with the Central Annual Plan draft was also held.

PREDICTIONS ON TIMING OF END TO FOOD RATIONING

Warsaw ZYCIE GOSPODARCZE in Polish No 40, 30 Sep 84 pp 1, 4

[Article by Grazyna Smulska: "Food Rationing: Keep It or Lift It?"]

[Text] Should rationing be dropped for good? Should this be done right away? If not now, when? Under what conditions? The draft Central Annual Plan [CAP] for 1985 brings no answers to these questions. The Distribution and Services Ministry has yet to pronounce its official position on this matter, but its representatives say it is still too early for derationing. One would think that the set of conditions which speak for or against rationing should--as a certain constant factor--be under the ministry experts' steady watch and should be easy to identify now, 3 years after rationed sales were instituted.

Unfortunately, the distribution ministry prefers to confine itself to counting ration cards for the time being. And, since such accounts occasionally go wrong, ministry officials have recently applied for buying note-counting machines, which requires hard-currency expenditures. This indicates the ministry is accommodating itself to the idea that rationing is going to exist long and be fine rather to gradually decline.

But the same questions which the distribution ministry regards as premature were answered independently by the Price Research Institute [ZBC] (last July), the Institute for the Domestic Market and Consumption [IRWK] (in August), and, partly, by the Price Board (on 30 August). Besides these, other concepts in this respect have been advanced. I am sure they deserve being considered, especially since food prices--as has been officially announced--are to go up next year in consequence of increased procurement prices. All price increases inevitably call forth the question if there will be more goods once they have become more expensive? In the case of food, this boils down to the question, will there be no ration cards?

For and Against

If you try to class arguments for and against rationing as such (while leaving aside, at this point, what specifically individual authors have to say), you will find that the former include arguments such as those that rationing ensures a just (equitable) distribution of goods in short supply.

gives people the certainty of being able to buy staple goods, counteracts profiteering, and furnishes some degree of regulations of lowest-income families' consumption standards. So, you will find arguments such as unreasonable buying behavior [ration card holders buy goods they do not really need]; widespread abuse in retail trade but also at higher organization levels of industrial production, distribution and, sadly, of economic administration; direct costs (ration-card distribution; clearance and control is handled by as many as 40,000 persons or so); lower efficiency at customer-service; or interregional distortions of consumption patterns (which was pointed out by Professor J. Kramerova in this journal, No 23/83). For example, butter rationing pushed up butter consumption in regions where plant fats or another animal fats had traditionally been consumed in high proportions.

Arguments against rationing should also include the fact that because rationing embraced the rural population only to a limited extent, consumption in rural areas has again been tending toward the own-product model of consumption of meat and meat products. This culminated in 1983 with a 65.9 kg per person annually. Of this meat, 70.7 percent was the average farmer family's own production (what is termed "self-provision"), while 10.8 percent was bought from unidentified sources. During the same period, meat consumption was 51.3 kg in worker families and 54.8 kg in worker-peasant families.

Admittedly, one purpose of the February 1982 food price reform and of other food policies was to encourage families in rural areas to expand their self-provision. The prevailing view at the time was that allowing animal breeding at many small worker-peasant households to decline in the 1970's has been premature and unjustified in view of available animal feed resources. However, the ensuing decisions (no ration cards for farmers) have induced even large farms to slaughter livestock for their own consumption and so to cut deliveries to public procurement centers. (In all, slaughters for private consumption went up from 436,000 in 1980 to 518,000 in 1982 and 559,000 in 1983.) So meat production did not increase, while meat sales to public buyers declined.

Moreover, against what may have been expected, self-provision deteriorated the nutritional pattern of the rural population which is doomed to eat meat preserves made at home under primitive conditions during long periods of time; free sales of meat from private slaughters are banned now.

The ZBC experts also point out that the bulk of farm labor input had shifted from production-for-sale to the incomparably less effective work for one's own home needs.

Ordinary people have increasingly been speaking out against food rationing. Specialists from the IRWK point out that whereas in 1981 and 1982 a clear majority of Polish society welcomed rationing, at present, against the backdrop of grain and butter output levels, people increasingly charge that rationing is being upheld artificially.

Habits Are Most Difficult To Fight

Understandably, this has its causes--last year's ill experience with de-rationing butter, certain habits, or convenience. The ZBC experts say that rationing has taken deep roots in the power system at all levels. Market organization is much more difficult a job than administrative rationing. Although it is blatantly at odds with the idea of the reform, rationing has many defenders even in circles which should be the first to push for economic progress. Society and the economic administration alike have largely grown accustomed to this specific form of the central-allocation system, and so the ZBC experts predict this habit will constitute a powerful barrier to any derationing bid.

Even more difficult to overcome will be rationing-induced deformations of consumption patterns.

The two teams (because the Price Board used the ZBC data in its study) generally agree that further delays are unnecessary and undesirable. The only difference between them is whether to lift rationing totally or to exempt at first some goods from this system.

The IRWK experts argue that any analysis of this matter should start with a look at the market situation of 1973-1974. This is how they argue for their case. The current statistical mean real income is roughly equivalent to real incomes of households recorded for that period. A "statistical" consumer income today buys roughly as much as in 1974. Moreover, the 1973-1974 market balance was, for Polish conditions, relatively high.

Although real incomes may be much the same, some modifications of demand can produce different price relations. However, differences between prices structures now and 10 years ago are not significant because the quicker rise of nonfood than of food prices during the last 2 years has largely restored the price structure from before the 1982 reform.

What the IRWK experts regard as their crucial conclusion is this: If the current supply situation--as determined by inventory and supply levels--is not "worse" than in 1974, then conditions necessary for derationing do exist. To be true, they make the reservation that "necessary" does not always mean "sufficient."

The ZBC team adopted a different approach, viewing prices as the key to everything. Prices are the chief instrument for developing a desirable nutrition model, because they affect directly consumer demand and indirectly the production and supply of food. In the 1970's, prices were used as a means to sustain an expensive meat-and-butter nutrition model. What we need now is a model which would be both less expensive and in line with latest findings in nutritional research, namely recommendations for relatively low consumption levels for meat and fish and high consumption levels for milk and dairy products. Plant fats should be used as substitutes for butter and lard. Grain product consumption should be kept high while beans consumption should be increased.

Rationing has been used to promote this particular consumption model. Ration cards were designed to get society accustomed to a food situation which, according to the ZBC team, is going to persist for many years to come yet. Not even in a remote future will Poland be capable of restoring its meat consumption levels of 1975-1980. Since possibilities for increasing supply are slim, prices must curb demand for certain products while boosting it for substitutes. Also, price levels and relations should ensure minimum food supplies to every population group.

Taking No Chances

A comparison of per-person flour supplies in 1983 to corresponding 1974 figures and of respective inventories in these 2 years (Tables 1 and 2) does not, say the IRWK experts, vindicate the call for derationing flour. But there are no counterindications in the case of groats, because 1983 per-person supplies amounted to 5.69 kg, or 0.25 kg more than in 1974. It is estimated that this year's groats supplies will be 1.29 kg more than in 1974, whereas the 1985 CAP target puts them 1.5 kg above the 1974 level.

To forestall purchases of groats for feeding animals the IRWK experts suggest certain indispensable price decisions.

The ZBC experts say that the rationing system's constrictive impact on grain product consumption is preposterous under the present food situation. The danger that grain products may be bought out for feeding animals is held to be an exaggeration by these experts. While previously this danger was great due to free-market price relations of grain products and feed grains, sales of flour and groats have since the 1981 price increase been steadily falling so that now they are below the sum total of all rations.

Representatives of the milling industry point at the widening milling capacity gap to justify their objections to the proposed grain product derationing. But these objections are at least debatable, especially since small mills owned by the Samopomoc Chlopska cooperatives are lying idle. Still, the industry's bosses point out, there is also the problem of insufficient grain.

In view of these fears, the ZBC proposes to establish more distinct quality and price differences, including a 10-zloty price increase for the Wroclawska flour (up to Zl 32 for the kilogram) which would correspond to increased production costs in connection with the higher procurement price for wheat. The (better) Poznanaka flour would then cost Zl 37, while pure wheaten flour and cream of wheat would tag Zl 40.

The ZBC data show that the proportion of expenditure on all grain products does not exceed 2 percent of total spending, and so price changes would hardly affect costs of living.

Furthermore, the ZBC proposes to increase prices for barley groats and oat-meals by 10 percent to prevent their being bought out for feeding animals. But since poultry has to feed on something (barley groats and oatmeal are

Table 1. Per Capita Foodstuffs in Kilograms

| Item | 1973 | 1974 | 1975 | 1980 | 1981 | 1982 | 1983 | Performance forecast 1984 | 1985 (CAP) |
|--|-------|-------|-------|-------|-------|-------|-------|---------------------------------|---------------|
| Meat, offals, meat products | 42.44 | 46.06 | 50.52 | 56.97 | 46.39 | 39.17 | 36.77 | 36.57 | 36.89 |
| Fats: | | | | | | | | | |
| animal | 4.74 | 4.58 | 4.47 | 4.53 | 3.98 | 3.43 | 3.37 | 2.83 | 2.86 |
| plant | 5.61 | 5.65 | 5.46 | 5.49 | 6.23 | 5.46 | 4.85 | 5.63 | 5.88 |
| butter | 4.29 | 4.64 | 5.23 | 7.28 | 6.86 | 5.82 | 6.83 | 6.52 | 6.47 |
| Wheat flour | 39.73 | 39.79 | 40.46 | 36.41 | 36.95 | 30.24 | 27.79 | . | . |
| Groats | 5.52 | 5.44 | 5.55 | 8.48 | 8.91 | 6.01 | 5.69 | 6.73 | 6.95 |
| Sugar | 30.44 | 32.07 | 34.00 | 29.66 | 24.59 | 30.05 | 32.67 | 31.85 | 31.87 |
| Chocolate and chocolate-coated products | 3.10 | 3.19 | 3.56 | 3.13 | 3.57 | 2.13 | 1.25 | 1.18 | 1.20 |

Source: Central Statistical Office yearbooks; "Draft Central Annual Plan for 1985"

Table 2. Per Capita Inventories in Kilograms

| Item | 1973 | 1974 | 1975 | 1980 | 1981 | 1982 | 1983 |
|-------------|------|------|------|------|------|------|------|
| Wheat flour | 2.95 | 2.85 | 2.84 | 1.77 | 1.49 | 2.28 | 1.62 |
| Groats | 1.07 | 1.10 | 1.16 | 0.76 | 1.18 | 1.24 | 1.06 |
| Sugar | 3.51 | 3.22 | 4.45 | 2.12 | 3.46 | 3.70 | 4.33 |

Source: Central Statistical Office yearbooks

used to feed, e.g., chicks), the ZBC also demands that homesteads keeping small numbers of poultry should be enabled to buy their feed somewhere.

The ZBC position, which certainly deserves being considered, is easily seen to be inconsistent in some ways. If, as shown before, the danger of grain products being bought out for feeding animals is really exaggerated, why this excessive wariness on the part of the ZBC?

The Price Board also regards as groundless fears that derationing might entail skyrocketing demand for grain products, which the milling industry estimates at 2.7 kg and the Distribution and Services Ministry at 4.4 kg per person. If the ministry's demand forecast proves true, deliveries would have to be 1 kg per person bigger than in 1980-1981, a time in which panic purchases resulted in the perishing of plenty of grain products.

It is also incomprehensible, says the Price Board, that the distribution ministry should make grain product derationing contingent on substantial increases of substitute supplies such as spaghetti or potato products, as well as on a changed structure of deliveries of groats and oatmeal.

The Price Board points out that grain products are difficult to ration because consumption is substantially differentiated. For some families, rations are too large while for others they are insufficient, and this creates appearances that demand remains unsatisfied. Demand for flour estimated on the basis of rations amounts to 500,000 tons annually, while deliveries which meet demand in full are slightly above 400,000 tons. The analogous demand estimate for groats, oatmeals and rice amounts to 410,000 tons, whereas deliveries amount to 320,000 tons.

The Price Board says derationing will not affect demand for grain products in urban areas. But the rural population may buy more flour because it will mill less of its own wheat. Backing the ZBC call for using idle cooperative flour mills, the Price Board says it is in the public interest to overcome the milling industry's reluctance to commission grain milling to those cooperative mills. These are generally localized in the same localities where there are grain procurement centers and bakeries. Grain transports could thereby also be reduced.

Despite the lack at present of signs that demand for grain products may soar if rationing is lifted, the Price Board too believes certain price measures are indispensable. So far, though, it has not divulged what particular moves it has in mind.

Too Much Sweetness

Last year's sugar supplies were close to those of 1974 (Tables 1 and 2), which the IRWK construes as a lack of counterindications for derationing sugar. Inventories were even bigger by 1.1 kg per person. However, if sugar is derationed people may start buying it out for moonshining. The IRWK argues then for a new, and substantially higher, price of sugar, specifically to double it, while paying a compensation for this to

medium- and low-income households. In 1974, a half-liter bottle of vodka could buy some 4.4 kg of sugar. Now this price relation is at 1 to 13.

The ZBC proposes two ways for departing from sugar rationing. Rations can be temporarily limited to 1 kg monthly per person at the current price of Zl 52 while free sales could be introduced at Zl 100; after a sustained close watch of the market, rationing could be lifted for good while sugar price would be fixed at Zl 80. The other possibility is to introduce free-only sugar sales at the price of Zl 80 as of now. In this case, considerable inventories would have to be amassed for possible increased purchases in the first stage of free sugar sales.

Sugar is a very peculiar case. While there is a widespread feeling that sugar is in short supply, Poland outbids all other COMECON countries and most Western countries in sugar consumption. Last year sugar consumption reached an unprecedented 45 kg per person, 1 kg above the record-high level of 1974 in the pre-rationing period (which ended in 1976).

This is mainly due to the excessive use of sugar in processing, which is encouraged by the relatively low price, easy access, as well as technological advantages which are however achieved at the expense of quality. Unit sugar consumption was increased from 167 kg in 1980 to 333 kg in 1983 in plum marmalade production, and, respectively, from 404 to 600 kg in jam production, and from 333 to 667 kg in sweetened juice production (which does confirm sugar's preservative effect). Breweries use sugar as substitute for part of the necessary malt, because this cuts production costs and speeds up fermentation. But it also deteriorates the quality of beer. The fruit and vegetable processing industry, sugar plants and breweries are estimated to use between the three of them annually 100,000-110,000 tons of sugar more than they need to use. Were even part of that sugar sold at retail shops, a large enough reserve could easily be built up for anticipated increased sales in the wake of derationing. But then subsidizing the price of sugar used in processing should be put to an end.

The Price Board has the following remarks. Fears that sugar consumption for moonshining may soar are exaggerated. One kilogram of sugar can be used to produce 0.6 or so liters of pure alcohol. Under the worst assumption that the 50,000 tons of sugar sold freely (or 3 percent of the sugar quantity assigned for domestic consumption) would be used for moonshining, the latter would have to produce 30 million liters of pure alcohol over its currently estimated level of some 40 million liters (with industrial production amounting to 140 million liters or so). To put it differently, moonshiners would have nearly to double their endeavors, or the overall number of moonshiners would have to soar, either of which seems very unlikely to the Price Board.

The Price Board emphasizes that although alcohol production from sugar has always been very lucrative, and is probably going to be so in the future, but it has hardly ever been a real threat to a balanced sugar market. Price differences between sugar and alcohol--and in this the Price Board echoes the IR&K argument--used to be lower than they are now. In 1970, for example, this price relation was 1:10.5. Later, half a liter of alcohol could buy

15.6 kg sugar in 1975, 22.1 in 1980, 14.3 in 1982, and 23.1 this year. Were the price relations of the 1970's restored, sugar consumption for moonshining would not only stagnate but even fall (because other raw materials are also used for this purpose), says the Price Board.

The retail price for sugar, the Price Board argument goes, should be based at least on its production costs, especially since it is low if compared to sugar prices in other COMECON countries. As soon as that would be possible, sugar subsidizing should be abandoned while rationing should be curbed or lifted. Sugar rations are one source of speculation as its black market price is Zl 100-140.

Will We Learn To Like Margarine?

Per-person consumption of fats, both of animal and plant origin, was last year nearly 1 kg below the 1974 level. But it was offset by 2 kg more butter (Tables 1 and 2). This makes the IRWK believe that preconditions for derationing do exist. Forecasts of this year's plant fat and butter supplies as well as by the "Draft Central Annual Plan for 1985," which imply that there is again going to be 2 kg of butter more per person than in 1974 but that the difference in plant fat supplies will be eliminated, further support this view.

What remains is the problem of animal fats. In 1984 and 1985, planned supplies will be 1.7 kg less than in 1974. But a comparison of aggregate per-person fat supplies for 1974, 1983, 1984 and 1985 (CAP targets)--14.8, 15.05, 14.9, and 15.21 kg, respectively--will only vindicate the call for derationing in the near future.

The IRWK points out that new investment and modernization ventures will prove indispensable in the dairy industry.

According to the Price Board, the fundamental problem in derationing at this stage is to adapt the demand structure to supply possibilities of individual fats.

Fats have always been in short supply in Poland, which explains why imports, above all of plant fats, used to be relatively high. In 1980, imports were at 132,000 tons and in 1982 at 168,000 tons. Last year imports were cut to 66,000 tons (or 12 percent of total supplies) which, according to the ZBC, was one reason behind the breakdown of the partial balance and the reintroduction of rationing. Demand for fats grew also because of lower pork consumption.

The official agricultural development program provides for a substantial increase in the procurement of rapeseed, the basic raw material in edible oil production. Total processing capacity is at present only 228,000 tons of margarine, at this year's output of 182,000 tons, which does furnish a certain reserve capacity. But there is no such reserve in the case of edible oils the production of which is limited by the output capacity of oil-refinery facilities.

Increased animal fat supplies depending on slaughter pig procurement levels should not be expected before the late 1980's.

Butter is a special problem. As the ZBC sees it, milk production and procurement can be expected to grow, but cheese-production capacities will also be growing in the dairy industry. Cheeses and other dairy products are designed to play a growing part in nutrition as substitutes for meat. Since their nutritive value largely depends on their fat contents, cheeses will be granted priority before butter.

While the situation is anything but bright, current fat consumption levels are satisfactory and the ZBC proposes to depart from rationing in two stages. In a first move, margarine and lard would be derationed with a simultaneous 10 percent price increase for plant butter, Vita margarine, soya and sunflower oils and lard. Low-grade plant oils would not be made more expensive. Lard should be marketed especially in regions where it has a long tradition of being used.

In the second step, butter would be derationed while its price would be seasonally adjusted (cheaper in summer and more expensive in winter). The purpose of this would be to eat more butter in summer, when there is more milk, and more margarine and edible oils in winter. This, according to the ZBC, is preferable to attempts to balance butter supplies by foreign transactions in the course of the year. Because of overproduction, butter exports are difficult to contract, especially in summer when nobody wants butter except perhaps for technical purposes. (Dairy cooperatives would not agree.)

By preliminary estimates, the difference between summer and winter prices of butter should be 15-20 percent. Particular quality grades of butter should be more distinctly differentiated in price, with fresh butter being more expensive than that kept in cold stores.

According to the ZBC, it is absolutely necessary to preserve the edible fats market in balance. Every impending threat to consumption at the current level of 23-24 kg per person must be promptly forestalled by imports of cheapest plant or animal fats, even at the cost of cutting imports of other important articles.

The Price Board views the claim that current fat consumption levels are satisfactory as debatable, especially as meat is in short supply. But it also says the Distribution and Services Ministry exaggerates when it makes derationing contingent on increases in supplies by 10-22 percent on average. Such a steep surge in supplies would theoretically boost consumption by 3-5 kg over this year's level up to 26-28 kg per person. Meanwhile, however, ration cards for butter remain partly unused and buyers show less and less interest in buying margarine, above all in the east and south of the country. Market pressures concentrate on lard, back fat and edible oils.

Forget Your Illusions

The average consumer ate in 1974, 7 kilograms of meat, offals and meat products more than in 1983 (65.6 and 58.2 kg, respectively). According to the IRWK, then, derationing is impossible. Other analyses confirm these doubts. In the "Draft Central Annual Plan for 1985" supplies of meat and meat products are estimated at 1,380,000 tons. Against the demand forecast the Distribution and Services Ministry drew up under the assumption that rationing will be preserved, this signifies a deficit of 330,500-282,500 tons depending on whether or not Poles will buy sugar instead of meat. By the ministry's own estimate, supplies must achieve the absolute minimum level of 1,500,000 tons.

To be true, the meat shortage is partly alleviated by supplies of substitutes. Compared to 1974, per-person supplies of milk, cheese and eggs (but not of fish) are higher now, yet too low to offset the differences.

To balance the meat market, prices would have to go up so significantly that IRWK believes derationing is out of the question. One more argument against derationing is the threat to the meat market from the inflationary overhang, which is negligible in the case of other foodstuffs.

But the ZBC calls for extraordinary measures designed to balance also this market. Such measures should include above all intensive propaganda actions for a new consumption model. Such actions, which should be overseen by experts in social psychology, public-relations work and marketing techniques, should make it clear that illusions have to be shed. While aspirations for increases in meat consumption reach 20 and even 30 kg, real meat consumption increase by 1990 will be no bigger than 5 kg per person.

Another condition for this is that the central authorities have a bigger quantity of meat at their disposal. For this purpose, the ZBC proposes that meat substitutes should be used more extensively than up to now, allowing the rural population to buy meat in public shops and making purchases of farmers' private slaughter meat; this would enable state agencies to tap farmers' overconsumption of meat which is now estimated to reach 50,000 tons. Also, illegal meat turnover should be stamped out and meat losses in the procurement and turnover stages should be combated relentlessly.

As in the case of sugar, rationing should be lifted in two stages. In other words, ration cards would temporarily coexist side by side with free sales. To make sure that biggest possible quantities of meat are available for free sales, it would be necessary to reduce rations by 0.5 kg in addition to the measures mentioned above.

It is estimated that in this way 450,000 tons of meat (50,000 tons of substitutes of meat weight, 50,000 tons gained due to rural consumption reduction, 150,000 tons from purchases of farmers' private slaughter meat, and 200,000 tons gained due to ration reductions) would find itself in free sales and the equilibrium price for this meat would be roughly 30 percent above the official one. The ZBC is sure this estimate is very close to what is feasible. The least certain item is the 50,000 tons to be gained due to reducing rural consumption levels, yet this does not invalidate the whole concept.

The first stage should be introduced right away, beginning, say, with free sales of smoked meat products chiefly in rural areas (with a view to discouraging farmers from slaughtering livestock for their own consumption). Total derationing may be possible in 1986. That opportunity should also be seized to revise mutual relations of official prices for meat and meat products.

The Price Board has come forward with no position on this matter.

The IRWK has also pondered prospects for derationing chocolate products but thinks this is unfeasible. Last year's supplies were nearly 2.5 times less than in 1974, and there are no signs that they should tend to increase.

The ZBC estimates that its project for derationing food will drive up monthly costs of living by Zl 110 (this does not embrace the impact of the price increase for butter which is very difficult to foresee). The ZBC believes this living cost increase should be compensated for the lowest-income families. The IRWK says nothing on this.

Details of the analyses submitted by the two expert teams may be debated, their optimism or pessimism may be shared or rejected, their excessive faith in the effects of prices (especially on the part of the ZBC) may be deplored. But one thing is for sure--the longer rationing is going to last, the more difficult will derationing be, and the higher will be the costs involved, both to individual citizens and to society.

CSO: 2600/143

BRIEFS

PLANNERS CONFER ON RESTRUCTURING--Work is continuing in the Planning Commission of the Council of Ministers on the program of structural changes in the national economy. Assumptions for this program were again the subject of discussion at the meeting of the Planning Commission Presidium on the 24th of this month. The general secretary of the Consultative Economic Council, Wieslaw Rydygier, and representatives of interested ministries and institutions participated in the discussions conducted by Deputy Premier Manfred Gorywoda, the chairman of the Planning Commission. /Text/ /Warsaw TRYBUNA LUDU in Polish 25 Sep 84 p 4/ 6806

RAIL ELECTRIFICATION PROGRESS--An intensive rate of work is being maintained at the present time on the Zielona Gora/Czerwiensk-Rzepin segment of the electrified Main Railroad Line at Odrzansk. The next segment, on the order of 25 km, has been prepared between Czerwiensk and Bytnica to conduct the current. The poles for electric wires have already been extended to the Rzepin station tracks. A viaduct has been built at the point of intersection between the Main Railroad Line and the international E-8 line. The highway runs on the mountain above the railroad line. At the same time the railroad stations on this line, such as Pliszka or Jerzmanice, which were exceptionally outmoded, are being modernized. According to Zdzislaw Wolny, the director of the Zielona Gora Region of the Polish State Railways Transport, electrification of the Czerwiensk-Rzepin segment will be finished in the middle of December this year. Beginning on 1 January of next year passenger train traffic south of Rzepin will comply with a new timetable. In Rzepin there will be a connection between the electrified southern segment of the Odrzansk Main Railroad Line and the active electrical line already running from Rzepin into the heart of the country through Zbaszynek and Poznan to Warsaw. /Text/ /Warsaw TRYBUNA LUDU in Polish 25 Sep 84 p 3/ 6806

COAL MINING REORGANIZATION--On 1 October the hard coal mines and the underground mining construction plants joined the coal mining syndicate structure. To guarantee the coal production level indispensable for the national economy, the coal mining syndicates will unite decisionmaking and legal-economic functions as multiplant public utility enterprises, on conformity with the systematic measures in the economic reform and in the spirit of the Ninth Extraordinary Party Congress resolution. At the same time, they are to assure conditions for greater efficiency in operation and for prospective development of the entire branch as a strategic field in the Polish economy. The coal mining syndicates will replace the current economic organizations, which were hard coal associations established arbitrarily for a transitional period by the Council of Ministers 2 years ago. /Text/ /Warsaw RZECAPOSPOLITA in Polish 2 Oct 84 p 1/ 6806

RATE, STRUCTURE OF INVESTMENTS IN LAST 4 YEARS

Belgrade PRIVREDNI PREGLED in Serbo-Croatian 12 Oct 84 p 5

[Article by Petrasin Petrasinovic, MA: "The Fourth Year of an Appreciable Drop"]

[Text] The declining trend of investment demand continued in the summer months, but with a somewhat weaker intensity than in the first half of this year. Estimates based on studies of market conditions show that in the first 9 months of this year the volume of investment in fixed capital was down about 11 percent from the corresponding period of last year. According to the same assessments, the drop was 13 percent in the first half of the year. This is now the fourth year with an appreciable drop in the real volume of investments in the fixed capital of the socialized sector (in 1981 the real volume of investments in fixed capital dropped off 12 percent, in 1982 the drop was 8 percent, and in 1983 it was 13 percent).

The decline in investment spending this year was influenced by factors which had in previous years determined the drop of investments, factors primarily related to the low accumulative capability of the economy and the measures taken to bring the oversized expenditure within realistic material and financial limits. This year the drop in investments was additionally influenced by the tighter conditions for the credit financing and funding of investment projects, by the bans on certain types of investment, by the need for augmented investment in working capital, and by the gradual activation of economic instruments and criteria governing investment activity (for example, higher rates of interest, the realistic rate of exchange of the dinar, realistic depreciation, and so on). However, the problem is that investment activity is being cut back linearly, not with selective measures. The characteristic features continue to be strong inflationary impulses toward investment expenditure, which come from the desire of investors to stick with investments they have begun to make even though there is no real material and financial backing for them. Which accounts for the widening of the gap between nominal and real indicators in the investment sector (the nominal indicators show a growth of about 43 percent, while the real decline was about 12 percent).

Declining Investments in Fixed Capital

Current developments in the investment sector this year have been significantly determined by the investment cycle begun in previous years (especially by investments undertaken after 1977). On this occasion we will indicate some of the characteristic long-term trends:

[i] The physical volume of investments has been declining steadily both because of the influence of reduced current investments as well as on the basis of completion and activation of investment projects begun earlier. The share of investments in total final demand on the domestic market, it is estimated, is ranging about 38 percent in 1984, while in previous years it went higher than 42 percent. The decline of investments in fixed capital is especially pronounced here, since their share in final domestic demand dropped 9 percent from 1980 to 1984 (it was 32 percent in 1980 and is estimated at about 23 percent in 1984). Investments in working capital are at the same time increasing, i.e., their share in final domestic demand rose 6 percent from 1980 to 1984 (it was 9.6 percent in 1980 and is estimated at 15 percent in 1984).

[ii] The declining trend of investments in fixed capital was especially pronounced in the socialized sector. It is significant that the estimated cost of investment projects under way requires sizable funds for completion, since the degree of completion of projects under way is relatively low (it ranges about 55 percent). That fact threatens the already low level of the anticipated efficiency of investment. Also, the investment projects carried over largely determine the pattern of current and future investments. First, because current investment activity is concerned with projects begun earlier; there have still been no essential changes in the way projects are built. Construction of projects at new sites is diminishing, but at the same time there is an increased share of construction at old sites. However, there is a particular problem in the fact that the share of investments in reconstruction, modernization and expansion of capacity is declining, and investment in replacement and maintenance is holding at the same level.

As a rule these are relatively small investments with high efficiency which under present circumstances--when a modest amount of accumulation is available--could yield manifold benefits for development. The large number of large-scale projects begun and the low level of their completion do not afford very much room for investment in reconstruction, modernization, replacement and maintenance. Likewise, the investment cycle is in the second phase of realization, which is going slowly and unselectively, and the result is constant extension of construction deadlines and very frequent changes in the estimated cost. The criterion of the orientation toward export and reorientation as to energy is too little manifested when investments are made. It is a good thing in total investments that the share of construction work in the technical pattern is declining. However, the problem is that the opportunities for installation of up-to-date imported equipment have been appreciably restricted because of the balance of payments. Worthwhile results have been achieved in the import substitution of equipment. It was assumed that this would be one of the important factors in increasing the production of domestic equipment even under the circumstances of a contraction of investment demand. Finally,

since investments in working capital were undervalued in previous years, this is now gradually being made up, which is diminishing the room for investment in fixed capital.

For example, the share of investments in working capital was only 20.5 percent of total investments in 1980, but it is estimated that it will range about 36 percent in 1984. In the coming period it is realistic to anticipate a growth of investments in working capital, which will reduce even more the room for investment in fixed capital.

Considerably More Energy Is Being Consumed Per Unit Output

The slump for several years and unselected investment policy have had a strong impact on the technical and technological lag of our economy relative to the advanced countries, and that is having manifold consequences. For instance, the technical and technological lag behind the advanced countries is an increasingly important factor in the deterioration of the economy's export capability and in the nonfulfillment of export plans; that is, it has a direct impact on the competitive position of our products with respect to cost, quality, and assortment, especially on the markets of the advanced countries. The problem of the technological lag is most strongly emphasized in those branches of the economy which have high accumulation and which in future are to be the center of our exporting activity (for example, machinebuilding, the electrical products industry, the chemical industry, the food processing industry), and it is also spreading dispersively to other branches. Considerably more energy, materials and labor are consumed in our country on many products than in the advanced countries, which is a reflection of the lower technical and technological level of production, and that makes it more and more difficult for them to participate in the international division of labor.

The reasons for the technical and technological lag are mainly well known, but in recent years they have been significantly related to unselective reduction of investments (in real terms investments have dropped by one-third since 1980), in which the largest reduction has been in imports of equipment, assemblies and parts (in real terms the imports of equipment have been cut in half since 1980). In view of the strong technical and technological development taking place in the world, and then the high technical and technological dependence of our country on imports and reduced opportunities for the transfer of technology from abroad, it is natural that the technological lag has been more and more evident in recent years.

The long-range economic stabilization program up to the year 2000 has called for renewal of 80 percent of the technical and technological basis of production, and OECD experts predict that at the end of this century only 15 percent of the present products will still be on the market. That is why it is especially important when investment decisions are being made at all levels in the preparation of medium-term and long-range plans to define which equipment and technology will be imported, what will be developed in cooperation with foreign partners, and what will be developed independently. Under present circumstances, since the capital for new investment undertakings is modest and to a significant extent blocked on the basis of completion of investment projects

undertaken in the past, investment in plant reconstruction and modernization and removal of "bottlenecks" in production have particular importance, and it is also indispensable in the preparation of new investment projects that their contribution to exports be the primary criterion in the selection of specific programs.

Ever greater reliance of financial institutions on the "own" resources of organizations of associated labor in the economy and the definition of clear criteria for credit support of investments will have a significant role in the processes of stabilization in the investment sector during the coming period. A process of radical change in the pattern of sources of financing to pay for investment projects has begun since 1980. The share of organizations of associated labor in the economy in total payments during the first 8 months of this year was 50.8 percent, as against 33 percent in 1980, while the share of the banks dropped at the same time from 51 percent in 1980 to 30.8 percent in the first 8 months of this year. The growth of payments from the resources of organizations of associated labor in the economy is the result of a growth of the current investment potential on the basis of annual and quarterly financial results, and especially on the basis of deferment of payments which have come due.

Investment Priorities Are Not Being Implemented

Given the high rate of inflation, investors strive to keep pace in neutralizing their money potential. The lag of the level of the interest rate behind the rate of inflation also heats up even more the unrealistic ambitions of investors. The interest rate is the key parameter for evaluating investment projects. The drop in the share of the banks in financing current payments is a reflection of the restriction on long-term lendings, the reduced transformation of short-term to long-term lendings, and then the absence of an inflow of resources on the basis of collection of payments on credits granted previously, and so on.

Changes in the economic pattern of investments are especially relevant from the standpoint of development. Current trends indicate that the investment priorities are still not being implemented, but that this year investment in branches with a greater export orientation has increased. Viewed in the aggregate, it is a favorable thing that economic investments have a somewhat more favorable trend than noneconomic investments. However, in the lag of investment, especially in implementing priorities with low export orientation (metal manufacturing complex, agroindustrial complex), is disturbing in the pattern of economic investments. Investments in raw materials and energy facilities, where the problem of the lack of capital to complete or activate construction projects already begun is increasingly pronounced, have also been lagging. As for noneconomic investments, the burden of reducing investments is being borne especially by reduction of housing construction. The share of housing construction in total payments on investment projects in the first 8 months of this year was 18.1 percent, as against 22.4 percent in 1982. The number of housing units under construction in the middle of this year was about one-third below the level in mid-1981.

The prospects for the development of investment demand and investment activity up to the end of this year and in the first half of 1985 suggest the conclusion that we can anticipate declining trends in the investment sector. It is probable that the rate of decline of investment demand will be somewhat less severe than in past months, but these trends will remain unchanged by all appearances; that is, the contraction phase in the investment cycle will persist. The high rate of inflation and the burden of large payments against existing projects will absorb a sizable portion of the modest financial resources for investments, which will diminish real possibilities for a growth of investments. The thrust which investment demand has on economic growth will continue to fall off, which means that the most energetic thrusts for strengthening and maintaining favorable economic conditions are thereby lacking.

Table 1. Payments on Investment Projects by Sources

| Sources of Payments on Investment Projects | Payments Made in Investment Projects, in millions of dinars, Jan- Aug 1984 | Pattern of Payments Made on Investment Projects | | | |
|---|---|--|-------|-------|--------------|
| | | 1981 | 1982 | 1983 | Jan-Aug 1984 |
| OUR's in the economy | 331,362 | 34.6 | 40.0 | 45.5 | 50.8 |
| OUR's in the noneconomic sector | 72,054 | 9.8 | 10.4 | 11.2 | 11.1 |
| SIZ's | 25,226 | 4.4 | 4.7 | 3.5 | 3.9 |
| Banks (including lendings) | 214,182 | 50.1 | 43.6 | 38.4 | 32.8 |
| DPZ's and DPO's | 9,244 | 1.2 | 1.3 | 1.4 | 1.4 |
| Total | 652,068 | 100.0 | 100.0 | 100.0 | 100.0 |

| | Index | | | |
|------------------------------------|-----------|-----------|-----------|--------------------------|
| | 1981/1980 | 1982/1981 | 1983/1982 | Jan-Aug 84 Jan-Aug 83 |
| OUR's in the economy | 124 | 146 | 130 | 159 |
| OUR's in the noneconomic sector | 120 | 135 | 123 | 140 |
| SIZ's | 117 | 136 | 84 | 159 |
| Banks (including lendings) | 114 | 111 | 104 | 121 |
| DPZ's and DPO's | 103 | 139 | 123 | 159 |
| Total | 117 | 126 | 115 | 143 |

Note: OUR--organization of associated labor; SIZ--self-managing community of interest; DPZ--sociopolitical community; DPO--sociopolitical organization.

Source: SAOPSTENJE, No 1679 of the Social Accounting Service, 2 October 1984.

Table 2. Payments on Investment Projects¹

| Indicator | Pattern | | | Index | |
|---|---------|-------|------------|-----------|--------------------------|
| | 1982 | 1983 | Jan-Jun 84 | 1983/1982 | Jan-Jun 84 Jan-Jun 83 |
| Total, by purpose | 100.0 | 100.0 | 100.0 | 115.8 | 137.6 |
| Economic Investments: | 69.2 | 73.1 | 73.3 | 122.3 | 139.8 |
| Industry and mining | 37.2 | 39.9 | 39.4 | 124.0 | 135.9 |
| Agriculture and fishing | 6.1 | 6.8 | 6.2 | 129.1 | 124.6 |
| Timber and lumber | 0.7 | 0.6 | 0.6 | 108.9 | 142.1 |
| Water management | 1.3 | 1.3 | 1.0 | 122.6 | 120.5 |
| Construction | 2.8 | 2.6 | 2.5 | 106.5 | 136.1 |
| Transportation and communi- cations | 7.6 | 8.6 | 8.8 | 131.2 | 149.1 |
| Trade | 3.5 | 3.0 | 3.1 | 98.7 | 133.0 |
| Hostelry | 3.0 | 3.0 | 4.1 | 115.0 | 188.7 |
| Crafts and trades | 0.7 | 0.8 | 1.0 | 131.2 | 179.2 |
| Municipal services and utilities | 4.0 | 4.7 | 4.3 | 133.7 | 131.1 |
| Financial and other ser- vices | 2.1 | 1.7 | 2.4 | 91.5 | 203.8 |
| Noneconomic Investments: | 30.8 | 26.9 | 26.7 | 101.2 | 132.0 |
| Education and culture | 3.3 | 3.0 | 3.5 | 106.4 | 168.8 |
| Health care and social welfare | 2.6 | 2.2 | 2.5 | 96.0 | 153.3 |
| DPZO [sociopolitical com- munity and organization (?)] | 2.5 | 2.1 | 2.5 | 100.0 | 168.7 |
| Housing construction ² | 22.4 | 19.6 | 18.1 | 101.2 | 121.0 |

1 Not including investments in working capital.

2 Includes funds for social services, bank resources and other resources.

Source: INDEKS, No 9 of the Federal Bureau of Statistics, 1984.

Table 3. Pattern of the Estimated Cost of Investments in Fixed Capital in the Socialized Sector, in percentage

| Indicator | 1977 | 1980 | 1983 |
|--|------|------|------|
| Activated before the reporting year | 12.9 | 12.0 | 11.3 |
| Activated during the reporting year | 20.0 | 21.5 | 23.6 |
| Not activated at the end of the reporting year | 24.1 | 30.0 | 31.8 |
| Envisaged for the coming period | 43.0 | 36.5 | 33.0 |

Source: SAOPSTENJE, Federal Bureau of Statistics, several issues.

Table 4. Development in the Investment Sector, growth rates in percentage

| <u>Indicator</u> | <u>1981</u> | <u>1982</u> | <u>1983</u> | <u>1984</u> |
|---|-------------|-------------|-------------|-------------|
| 1. Total investments | 0.8 | -4.5 | - 7.5 | - 7 |
| In fixed capital | -10.1 | -5.8 | -10.7 | -11 |
| In working capital | 43.0 | -1.1 | 5.0 | 3 |
| 2. Economic investments in fixed capital | | | | |
| Socialized sector | -11.6 | -6.5 | -11.7 | -13 |
| 3. Noneconomic investments in fixed capital | | | | |
| Socialized sector | -13.9 | -5.4 | -19.0 | -15 |

Source: Federal Bureau of Statistics and internal estimates.

Table 5. Pattern of Investment, in percentage

| <u>Indicator</u> | <u>1980</u> | <u>1981</u> | <u>1982</u> | <u>1983</u> | <u>1984</u> <u>(estimate)</u> |
|---|-------------|-------------|-------------|-------------|----------------------------------|
| Share in gross investments | | | | | |
| Fixed capital | 79.5 | 70.8 | 69.8 | 66.3 | 63.1 |
| Working capital | 20.5 | 29.2 | 30.2 | 33.7 | 36.5 |
| Share in the socialized sector's investments in fixed capital | | | | | |
| Economic | 76.5 | 82.3 | 81.8 | 83.0 | 83.2 |
| Noneconomic | 23.5 | 17.7 | 18.2 | 17.0 | 16.8 |

Source: Federal Bureau of Statistics and the Federal Social Plan [?].

Table 6. Pattern of Investments in Fixed Capital of the Socialized Sector With Respect to the Nature of Construction, in percentage

| <u>Type of Investment</u> | <u>1977</u> | <u>1980</u> | <u>1983</u> | <u>1984</u> |
|---|-------------|-------------|-------------|-------------|
| New plants on a new site | 36.9 | 42.9 | 38.2 | 36 |
| New plants on an old site | 20.2 | 18.6 | 22.4 | 24 |
| Reconstruction, modernization and expansion | 27.8 | 24.0 | 22.9 | 24 |
| Replacement and maintenance | 15.1 | 14.5 | 16.5 | 16 |

Source: SAOPSTENJE, Federal Bureau of Statistics, several issues (an estimate is given for 1984).

Table 7. Technical Pattern of Investments by the Socialized Sector in Fixed Capital, in percentage

| <u>Purpose of Investment Projects</u> | <u>1977</u> | <u>1980</u> | <u>1983</u> | <u>1984</u> |
|---------------------------------------|-------------|-------------|-------------|-------------|
| Construction projects | 47.4 | 51.7 | 45.4 | 43 |
| Equipment--domestic manufacture | 25.8 | 24.5 | 27.4 | 30 |
| Equipment--imported | 19.3 | 13.5 | 13.1 | 11 |
| Other | 7.6 | 10.3 | 14.1 | 16 |

Source: SAOPSTENJE, Federal Bureau of Statistics, several issues (an estimate is given for 1984).

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